The Mining Journal

RAILWAY AND COMMERCIAL GAZETTE.

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

No. 651.---Vol. XVIII. LONDON, SATURDAY, FEBRUARY 12, 1848. [Price 6d.

Stannaries of Cornwall—In the Vice-Warden's Court.

HILL *v.* VIGERS,

IN RE POLBEROU,

OTHERWISE SAINT AGNES CONSOLIDATED MINES.

NOTICE IS HEREBY GIVEN, that the SALE of the ENGINES, MINING MACHINERY, MATERIALS, and OTHER EFFECTS, upon and belonging to the ROYAL POLBEROU MINES, otherwise the SAINT AGNES CONSOLIDATED MINES, in the parish of SAINT AGNES, within the said Stannaries, advertised to be held on the 15th day of February inst.,

IS POSTPONED

UNTIL THE FOURTEENTH DAY OF MARCH NEXT.

HODGE & HOCKIN, Solicitors, Truro,
For GRYLLS & HILL, Solicitors, Helston.

Dated Registrar's Office, Truro, Feb. 8, 1848.

HARROWBARROW OLD MINE, CALSTOCK.—SALE, BY AUCTION, OF VALUABLE MINE MATERIALS,

Without reserve, for which payment will be received in approved bills, at 3 months' date.

TO BE SOLD, BY PUBLIC AUCTION, by GEO. CARNE, at HARROWBARROW OLD MINE, in the parish of CALSTOCK, on Tuesday, the 15th of February, at Eleven o'clock in the forenoon precisely, the whole of the valuable

MACHINERY AND PLANT:

Comprising excellent capstan and capstan rope, about 100 fathoms; shears, pulleys, and sheaves; 2 horse-whims, whim-ropes, poppet-heads and stands, water and cog-wheels, rollers and belts for machine for cleaning tin, 2 balance-bobs, stands, and bearings, main rods, strapping plates and bolts, about 50 fathoms of 9-inch pumps, with windbore, working barrel, H-piece, clack door, and seating, complete, plunger-poles, small shears and triangle, 2 pairs (one brass) of double-purchase blocks, large wrench and rope, several cleansing racks and troughs, 50 fathoms zinc pipe, several tons of useful iron and steel, 2 beams and scales (one very large), about 20 cwts. weights, weighing stand, large bell and pulley, adapted for a factory, quantities of friction-wheels and brasses, yokes and glands, ladders, kibbles, hand and wheelbarrows, spare rope, Norway and American timber, oil, grease, paint, safety-fuze, nails, grates, shovels, lanthorns, miners' tools, ore barrels, tar, leather, lead, kibbles, chain of various sizes, &c. &c. &c.; the FITTINGS of SMITH'S SHOP—complete set of taps and screw-plates, 2 pairs large bellows, 2 anvils, 2 vices, trough, horse, and a large variety of tools and useful articles. In CARPENTER'S SHOP—benches, cross-cut saw, miners' and tool chests, grindstones, vats and kieves, rails, &c.; together with the STAMP-AXLE, STAMPS, &c. Also, about FIFTY TONS of TINSTUFF, now lying on the floors, and a variety of useful effects.

The whole of the above valuable property is, for mining purposes, as good as new, having been but little used, and well deserves the attention of captains and agents of mines. The mine is about 2½ miles from the Tamar—is nearly adjoining the mail road from Cornwall to Devonshire—thus affording great facilities for the removal of heavy pieces of machinery.

Full particulars may be known on application to Mr. George Carne, 20, George-street, Plymouth.—The machinery may be viewed three days (Sunday excepted) before the sale, or any previous day, by appointment with Capt. Cook, at the mine.

Catalogues seven days before the sale, on application at the mine; or at 20, George-street, Plymouth.

N.B.—The engine has been disposed of by private contract, but the stamping machinery will be sold as above.

All PERSONS having any CLAIM on the ADVENTURERS, are requested to send the particulars of their accounts to the auctioneer.

Dated George-street, Plymouth, Jan. 22, 1848.

WHEAL GRAY, in the parish of GERMOE (about six miles from Hayle).—FOR SALE, BY PUBLIC AUCTION, on Tuesday, the 15th day of February, 1848, about THREE HUNDRED LOTS of NEW and SECOND-HAND TIMBER, well adapted for house-building and mining purposes.

The Sale will commence precisely at Ten o'clock in the forenoon.

Also, FOR SALE, BY PRIVATE CONTRACT, AT WHEAL GRAY,

1 53-inch cylinder PUMPING-ENGINE, 9 feet by 7 feet stroke.
3 Excellent BOILERS (about 40 tons, nearly new).
1 40-inch cylinder PUMPING ENGINE, 9 feet by 7 feet stroke, with one boiler.
1 18-inch (double) STAMPING-ENGINE, 4 feet stroke, with fly-wheel, complete, and well adapted for winding-engine.
3 Nearly new, CAST-IRON AXLES, lifting five times on the round, for 12-heads.
3 Capstans and 3 shears, complete; 100 fathoms 9-inch capstan rope, 3 balance-bobs, with iron-work, complete.
3 Angle-bobs, 1 cast-iron beam, H-pieces, doorpieces, working barrels, windbores, and pumps, varying in size from 16-inch to 6-inch bore.

The engines and pitwork are in excellent condition—the water in the mine being drunk in preference to other water in the locality, after being pumped to surface by the engine.

A large quantity of slime frames, buddles, and sheds; also, two excellent "Brunton's" Patent Frames, as well as the wood-house which contains them.

Two smiths' bellows, anvils, vices, smiths' and miners' tools, tramroad iron, new and old iron, of various sizes.

Large assortment of faggotted and common iron strapping plates.

Ten horse-whims, 10-feet cage, in good condition; about 1000 fathoms of horse-whim chain, 20 horse-whim kibbies, screwing tools, punching-engine, pick and shovel hilts, and various other articles, worthy the notice of mine agents.

For particulars, apply to the agent on the mine; or Capt. Thos. Richards, Marazion.

STOKECLIMSLAND, CORNWALL.—IMPORTANT AND BEAUTIFUL ESTATE ON THE BANKS OF THE TAMAR FOR SALE.

AN AUCTION will be HELD by Mr. EDWARD RENDALL, at GOLDING'S HOTEL, CALLINGTON, on Thursday, the 24th day of February next, at Three o'clock in the afternoon, for SELLING all that MESSUAGE, TENEMENT, and FARM, called

H A M P T,

Situate in the parish of STOKECLIMSLAND, in CORNWALL, now in the occupation of Messrs Arthur and William Kelly, the proprietors.

The estate lies within a ring fence, and comprises a newly-built DWELLING-HOUSE, BARN, THRASHING MACHINE, with every other convenience, and about ONE HUNDRED and NINE ACRES of rich LAND—5 acres of which are superior orchard, 15 acres meadow, and the remainder arable and pasture.

It is situated about four miles from Callington (near the celebrated Wheal Maria Mine), and six from Tavistock, in one of the most splendid districts of the county of Cornwall—adjoins the lands of Sir William Call, Bart., and is only a short distance from the beautiful cottage and grounds of Endsleigh, belonging to his Grace the Duke of Bedford.

The turnpike road is contiguous, and every facility is afforded in the carriage of manure.

The property is all fee-simple, except a very small portion, which is held for the residue of an absolute term of 500 years, and land tax, to the amount of £2, is redeemed.

The timber to be taken at a valuation.

To view the premises, apply to Mr. Arthur Kelly thereon; and for all further particulars, to Mr. Bishop, solicitor, Fowey; or to Mr. Bargent, solicitor, Liskeard.

Dated Liskeard, Jan. 21, 1848.

TO IRONMASTERS, TIN-PLATE-MAKERS, IRON-FOUNDERS, BOILER-PLATE-MAKERS, &c.—A most desirable INVESTMENT IN TRADE TO BE SOLD, BY AUCTION, on Tuesday, the 29th day of February, 1848, at the CASTLE INN, in the town of SWANSEA.

Sale to commence at Two o'clock in the afternoon precisely.

All that newly-erected TIN-PLATE WORKS, now in complete order for working—consisting of TWO NEW STEAM-ENGINES, ROLLING-MILLS, FURNACES, Storing-rooms, Offices, and Yards—forming most COMPACT WORKS for any of the above branches of manufacture—standing on about six acres of land in all, adjoining the River Dafen, with a railway from the works direct to the port of Llanelly, which is distant about two miles.

The premises are held under a lease, for 99 years, at the low ground-rent of £30 a-year, with power for the lessees to purchase the freehold, at a moderate price, at any time within 10 years from 1846.

For further particulars (or a view of the premises), apply to Mr. B. JONES, solicitor, Llanelly.

DEAN FOREST, GLOUCESTERSHIRE.—IMPORTANT and VALUABLE COAL-FIELDS, in extent about SIX HUNDRED ACRES, for ABSOLUTE SALE.—Mr. WILLIAM GRAHAM is instructed by the proprietor to SELL, BY AUCTION, at the BELL HOTEL, GLOUCESTER, on Saturday, the 4th day of March, 1848, at Three o'clock in the afternoon, subject to conditions of sale, those extensive and

VALUABLE COAL-FIELDS,

Known as the BRITANNIA and the FAVOURITE COLLIERIES.

LOT I.

THE BRITANNIA:

Is galed to the Coleford High Delf Vein of Coal, and all veins above it.

LOT II.

THE FAVOURITE:

Is also galed to the Coleford High Delf Vein of Coal, and all veins between it and the Churchway High Delf Vein.—These collieries adjoin each other, and contain ABOUT SIX HUNDRED ACRES OF COAL,

And will be [illegible] together or separately, as may be agreed on at the time of sale.

The Severn and Wye Railway intersects a portion of the Favourite Colliery, and joins the locomotive branches of the South Wales, and Monmouth and Hereford Railways (for which an Act is obtained), a short distance to the east of them. They are very well situated, at Brierly, equi-distant between Coleford and Mitcheldean—surrounded by some of the best collieries in the Forest, and are in such an advantageous position, that both may be thoroughly worked with the same establishment.

Particulars and conditions of sale may be had at the principal inns in the adjacent towns; the place of sale; of J. R. N. Norton, Esq., and Messrs. Powles, Tyler, and Powles, solicitors, Monmouth; C. G. H. St. Pattrick, Esq., solicitor, Worcester; the auctioneer, Blue Broom, Ragland and Newport; and for a view of a map of the Forest, and the plan of the collieries, apply to John Atkinson, Esq., Coleford, her Majesty's Gaveller for the Forest of Dean; or to the proprietor,

Mr. WILLIAM COURT,
Auctioneer and general valuer, Monmouth.

VALUABLE PUMPING AND WINDING ENGINES FOR SALE.—TO BE SOLD, BY PRIVATE CONTRACT, at WHEAL VOR MINE, in the parish of BREAGE, CORNWALL—

1 80-inch DRAUGHT ENGINE, 10-feet stroke in cylinder, and 8 feet in shaft, main beam and caps, top nozzle, spring piston and rod—all new this year; with four boilers, of 12 tons each, in excellent repair.
1 80-inch DITTO, 10 feet stroke in cylinder, 7½ feet in shaft, cylinder, pistos, bottom and cover, nearly new, with two boilers, of 12 tons each, and three boilers, of 10 tons each, all lately thoroughly repaired.
1 49-inch DITTO, 9 feet stroke in cylinder, and 7 feet in shaft, without boilers.
1 20-inch WINDING ENGINE, 5 feet stroke, with two boilers, of 4 and 6 tons, and vertical cage, all in complete repair—the boilers and some other parts nearly new.
1 18-inch DITTO, 4 ft. stroke, with one boiler, of 5 tons, and horizontal cage, complete.
Several TONS of straight and turned STEAM-PIPES.
12-head CAST-IRON STAMPS AXLES, with bearings, oak frames, &c., complete.
A powerful WEIGHING MACHINE, nearly new, comprising every requisite.
An immense number of PUMPS, matching-pieces and windbores, 12 to 17-inch bore, with working barrels, doorpieces, H-pieces, cases, with stuffing-boxes and glands to match, from 11 to 19 inches bore, and plunger-poles, from 12 to 19 diameter.
Faggotted rod and cap plates, 6, 7, and 8 inches wide, staples and glands, eyerunners, caps, saddles, troughs and gudgeons for balance and other bobs.

Application to be made to Capt. R. Blight, jun., on the mine.

Dated Nov. 29, 1847.

N.B.—The above are of easy transit to Hayle wharfs, and from thence on ship-board, if required.

VALUABLE AND EXTENSIVE COLLIERIES, MACHINERY, COLLIERY PLANT, FARM, and LANDS, near ST. HELENS.—TO BE SOLD, BY PRIVATE TREATY, in consequence of the death of the surviving partner in the firm of Speakman, Caldwell, and Co., all those old-established and well-known COLLIERIES, called the GERARD'S BRIDGE, COWLEY HILL, and LITTLE COWLEY HILL COLLIERIES, comprising the following SEAMS of COAL—namely:

THE LITTLE MINE, or HIGHER DELF.
THE RAVENHEAD MAIN DELF.
THE ST. SEBASTIAN MINE.
THE SIR JOHN MINE.
THE FLAGGY DELF.
THE RUSHY PARK DELF—and
THE LITTLE MINE, or YARD MINE.

The above-mentioned collieries are in full operation, and in good working order, producing, at present, upwards of 100,000 tons per annum, and are held under leases from various parties, and for various terms—subject to the payment of annual rents and periodical admeasurements. The quantity of coal remaining ungotten, is estimated at about 1,000,000 of tons, which are laid dry by the present winnings.

The capabilities and operations of the concern may be very considerably extended, by a moderate outlay of capital, in a new opening on the deep of the present levels.

The machinery and general working stock are in a very efficient state, and will be sold with the mines.

The collieries are situate on the banks of the Sankey Canal, and have a branch railway from the mouths of all the pits, communicating with the St. Helens and Runcorn Gap Railway. They have been established for a period of upwards of 30 years, and enjoy an old and valuable connection amongst the glass, alkali, and other manufactories, in the immediate locality, and also in the salt districts of Cheshire, besides an extensive steam and export trade at the port of Liverpool.

There is attached to the collieries a FREEHOLD FARM, known as LITTLE COWLEY HILL ESTATE, containing 21 statute acres (very eligibly situate for building purposes), with a good HOUSE and suitable OUTBUILDINGS, now occupied by Mr. Henry Taylor, agent of the colliery, and may either be taken by the purchaser of the collieries, or the trustees will dispose of it separately.

Further information may be obtained on reference to J. LANGSHAW, Esq., of the Hollins, near Bolton-le-Moors; Mr. John Mercer, colliery surveyor, St. Helens, at whose office plans of the workings are kept, and may be inspected; or for full particulars, and to view the property, to Mr. Taylor, agent, on the premises; C. M. Robinson, Esq., solicitor, Wellington, Salop; or to J. Ansdell, Esq., solicitor, St. Helens.

January, 1848.

PEMBROKESHIRE.—TO BE LET, for a term of years, the valuable VEINS of ANTHRACITE COAL and IRONSTONE, under the FARM of CRESWELL, comprising about 300 acres.—The shallow veins of coal only have been partially worked, by virtue of surface levels, but the main, or timber, vein is quite whole.

The property lies on a branch of the Milford Haven, where quays, coal-yards, and other requisites for shipping, are already constructed. The branch of the South Wales Railway, leading to Hobbs' Point, will also pass through a part of the farm.

For further particulars, apply to James Wilson, mineral agent and surveyor, Haverfordwest.—Feb. 7, 1848.

TO ENGINEERS AND COLLIERY AGENTS.—FOR SALE, at FALLOWFIELD LEAD MINE, near HEXHAM, a single acting HIGH-PRESSURE PUMPING-ENGINE—cylinder 50 inches, stroke 6 feet; TWO SETS of PUMPS, 13 and 10 inches diameter, with brass and cast-iron working barrels, spears, plates, and sundry other useful materials.—Apply to Mr. George Henderson, Acombe, near the mine; or to Messrs. Hawthorn's, engineers, Newcastle-on-Tyne.

February 3, 1848.

STEAM-ENGINE—TO BE SOLD, a HIGH-PRESSURE STEAM-ENGINE, 18-horse power, adapted for winding and pumping, 18 inch cylinder, 3-feet stroke; fly-wheel, 15 feet diameter; cylindrical boiler, 22 feet long, 5 ft. diameter, with valves, &c.—made by one of the first engine-makers.

Further particulars may be obtained, and the engine seen, by application to John Graham, the overseer, at the Rushes Colliery, or Tolerton, in the Queen's County; of William Brophy, Esq., solicitor, 14, Talbot-street, Dublin; or of Joseph Hedley, Esq., C.E., 29, Bucklersbury, London.

FOR SALE, BY PRIVATE CONTRACT—A single-acting PUMPING-ENGINE—cylinder 30-inch diameter, 9-feet stroke, equal beam, with 7-ton boiler, cisterns, spring beam, and first set of rod-shafts attached, being the engine of Wheal St. Cleer.—For particulars, apply to Capt. Osborne, Liskeard; Mr. West, engineer, St. Blazey; or Mr. Rendle, the purser, 13, Octagon, Plymouth.

CRUSHING MACHINERY WANTED.—Any parties having good and powerful MACHINERY to DISPOSE OF, may hear of a PURCHASER, by addressing, with full particulars, price, &c., to C. J. Harvey, Dolgelly, North Wales.

IMPORTANT MINING SHARES FOR SALE.—Captain JOHN SPARGO announces to his friends, and mining adventurers generally, that he is instructed to SELL SHARES in the following MINES—the qualities and prospects of which are well known to him, from his having superintended the operations therein for many months—and, in some instances, for years.

The peculiar advantages to be obtained in the present instance is, that the whole of the purchase-money is to be paid into the funds of the different mines, for the purpose of providing the necessary capital for putting them into full operation; Capt. Spargo, therefore, highly recommends these mines, as affording an opportunity of purchasing on most liberal terms.

NORTH WHEAL FRIENDSHIP—TIN MINE.

200 (1024ths) shares, at £3 per share.

This mine is in a position to *ensure dividends*, as soon as the necessary machinery is erected. A large pile of tin, of excellent quality, is now at grass: excellent stones of tin can be broken at the present level; and I can undertake that returns can be made before one-half the sum intended to be provided by the sale of the above shares is expended.

The mine can be worked by water-power.

GREAT WHEAL FREDERICK—TIN MINE.

500 (2048ths) shares, at £2 per share.

This mine is well known as having formerly returned large quantities of tin above the adit level. During the last two years I have superintended the operations. Large bunches of tin are gone down in the different adits, and nothing is now required but to erect machinery and sink upon the lodes. The mine is capable of being worked by water-power. I estimate the cost of erecting machinery and sinking for deeper levels at about £800, and I have no doubt of making ample dividends in a very short period.

WHEAL SAMSON—GOLD, SILVER, AND COPPER MINE

200 (1048ths) shares for sale.

The extraordinary quality of the ore in this mine justifies the most sanguine expectations. Many hundred pounds' worth of silver ore has been returned by a few miners from the branches of the lode. Samples have been broken by the present proprietor, worth, at least, £150 per ton. The main lode has now been discovered, and driven upon between 40 and 50 fathoms, at about 15 fathoms from the surface. Levels can be taken up on the course of the lode from the sea-shore, giving backs of from 60 to 70 fathoms, and there is every assurance of a large course of ore. I consider that from £600 to £800 would do all that is necessary in this mine, and that it is one of the most extraordinary speculations in the county. Shares in this mine have been sold for £20, but the above number of shares will be sold at a very low price, and the whole amount applied to working the mine.

Captain SPARGO is also instructed to SELL a FEW SHARES in the

EAST ALVENNEY MINE.

This mine is now working—the whole of the necessary machinery is erected: a shaft is sunk on the course of the lode. The quality of the tin is the finest that can be produced in Cornwall. The adventurers are now about to commence stoping on a rich course of tin, and there is no doubt but the mine is now on the eve of paying ample dividends.

ALSO, AN ENTIRE TIN SETT.

This tin mine is of great promise. The whole sett will be disposed of at a moderate price.

Applications for shares in these mines to be made to Capt. JOHN SPARGO, Down Gate, Stoke Climsland, near Callington, Cornwall; or to Mr. James Lane, 75, Old Broad-street, London, at whose offices plans and specimens may be seen.

TO LEAD SMELTERS AND OTHERS.—WANTED, by a person of undoubted character and qualifications, a SITUATION as MANAGER, or ASSAYER, to a respectable Lead Smelting firm. Has had great experience in smelting, and perfectly understands the different modes of smelting and refining, as well as the assay of ores generally.—Letters, addressed "A. B.," care of Mr. Noah, 116, York-road, Lambeth, London, will meet with immediate attention.

A GENTLEMAN, who understands COPPER and LEAD SMELTING, in all its branches, by the reverberatory process, and who is now in Germany, studying that by the blast, wishes AN ENGAGEMENT. Has no objection to go abroad. The advertiser understands the French, German, Spanish, and Danish languages.—Letters (pre-paid), addressed "C.," care of the Editor of the *Mining Journal*, 26, Fleet-street, London, will be forwarded.

TO DIRECTORS AND SHAREHOLDERS IN MINES.—ASSAYS and ANALYSES of all MINERAL PRODUCTS carefully PREPARED by Messrs. REYLIN and CHEESMAN, Analytical Chemists, &c., No. 30, Myrtle-street, Queen's-road, Dalston.

TO MINE AND COLLIERY COMPANIES AND PROPRIETORS.—TWO SURVEYORS, thoroughly competent, are desirous of undertaking the SURVEYS of MINES and COLLIERIES, on terms advantageous to those who may have occasion for their services.—SALES or PURCHASES of SHARES in the above attended to with promptness and punctuality, on the usual commission.

3, Cannon-row, Westminster. DE WINTON & BONE, Surveyors.

MR. R. TREDINNICK, THREE KING'S COURT, *LOMBARD-STREET, LONDON,*

Continues to DEAL in every description of MINING, RAILWAY, BANKING, INSURANCE, CANAL, and OTHER SHARES.—Statistical information afforded gratuitously, upon personal application.—MONEY ADVANCED upon the above securities.

JAMES LANE, MINING SHARE DEALER, 75, *OLD BROAD-STREET, LONDON.*

WILSON & FRASER, 2, WELLINGTON-BUILDINGS, LIVERPOOL, and 13, EXCHANGE-PLACE, GLASGOW, have always ON SALE PIG-IRON, BAR-IRON, RAILWAY CHAIRS, and RAILWAY BARS.

MONEY.—MESSRS. KILLICK & CO. (late Winstanley, Killick, & Co.), SHAREBROKERS, inform their friends and the public, they make IMMEDIATE ADVANCES, to any amount, on the deposit of English and Foreign Railway Shares, Scrip, and Debentures, upon exceedingly advantageous terms: they also BUY and SELL every description of STOCK and MINING SHARES, at much less commission than usually charged.

6, Bank Chambers, opposite the Bank of England.

ABERGWESSIN SILVER-LEAD MINES—NOTICE OF CALL.—The shareholders in this undertaking are hereby requested to PAY a further CALL of ONE POUND per share into the banking house of the National Provincial Bank of England, at Brecon, to the credit of the committee of management of this company, in two equal payments: the first payment to be made on or before the 23d day of February, and the second one on or before the 23d day of March, 1848.

And Notice is hereby further given, that all shares upon which the above call, or either part of it, shall not be paid on or before the days above-named, will be absolutely forfeited.

By order of the committee,

January 17, 1848. P. P. COUCH, Manager.

PATENT GALVANISED IRON COMPANY—TRADING under the FIRM of "MALINS & RAWLINSONS."

Notice is hereby given, that the directors have this day made a further CALL of TWO POUNDS per share upon the respective owners of the NEW SHARES, authorised to be created by the resolution of the special general meeting of the above company of the 26th of October, 1845—the said call to be PAYABLE on the 19th day of February inst.; and the shareholders are requested to pay the same into the bank of Messrs. Prescott, Grote, and Co., of 62, Threadneedle-street, London. By order,

3, Mansion-house-place, London, Feb. 1, 1848. S. VINCENT, Secretary.

TINCROFT MINING COMPANY.—Notice is hereby given, that a GENERAL MEETING of the shareholders in this company will be HELD at this office on Thursday, the 17th day of February next, at Two o'clock precisely.

44, Finsbury-square, London, Jan. 20, 1848.

WHEAL BARBARA MINING COMPANY.—Notice is hereby given, that the AFFAIRS of the COMPANY will be henceforth CONDUCTED at the OFFICES, 4, STAMP-OFFICE BUILDINGS, MANCHESTER, in pursuance of the resolutions passed at the special general meeting of adventurers, held, pursuant to notice, on the 7th January, 1848, where all communications are requested to be addressed, and information can be acquired. WM. SHEARMAN, Purser.

WHEAL BARBARA MINE—NOTICE.—That all OUTSTANDING SCRIP BE SENT into the BRITISH MINING OFFICES, No. 4, Stamp-office Buildings, Manchester, on or before the 1st of March, 1848; upon the delivery of such scrip, a transfer will be returned, according to the Cost-book Principle.

WM. SHEARMAN, Purser.

ASSAYING AND ANALYSIS.—Mr. MITCHELL begs to inform the MANAGERS, &c., of MINES, SMELTING-WORKS, and MANUFACTORIES, that he still continues to CONDUCT ASSAYS and ANALYSES of all PRODUCTS, metallurgical and manufacturing, at his LABORATORY,

23, *HAWLEY-ROAD, KENTISH TOWN, LONDON,*

to which address communications are to be forwarded.—Instruction in all branches of assaying and analysis as usual.

ADCOCK'S PATENT SPRAY PUMP.—This important INVENTION having been PERFECTED, and brought into SUCCESSFUL PRACTICAL OPERATION, the PATENTEE is ready to RECEIVE, and to execute ORDERS.—Apply to Henry Adcock, C.E., at his offices, No. 3, Northumberland-street, Strand, London, where pamphlets, descriptive of the invention, may be had: at the office of the *Mining Journal*, 26, Fleet-street; and through any respectable bookseller—price 6d.

TO ENGINEERS AND IRONFOUNDERS.—PERLBACH'S PATENT PROCESS OF UNITING METALS AND ALLOYS.

Described in the *Mining Journal*, No. 649, will be found very useful for STRENGTHENING IRON CASTINGS, by inserting bars, or pieces, of wrought-iron; and for UNITING CAST-IRON with COPPER, STEEL, GUN METAL, BRASS, and OTHER ALLOYS.

For LICENSES and particulars, apply to Mr. C. A. PRELLER,

31, Abchurch-lane, London.

PATENT GALVANISED IRON AND WIRE ROPE WORKS, *MILLWALL, POPLAR.*

ANDREW SMITH begs to inform the Mining, Railway, and Shipping interests, that he has obtained a PATENT for an IMPROVED METHOD of GALVANISING IRON, producing a much superior article at a considerable saving in cost—the improved process for galvanising wire rope, adding only £10 per ton instead of £20, under the ordinary processes. The rope is extensively used in damp situations, for mining and railway purposes, and for ships' standing rigging.

PATENT METALLIC LAVA—FOR FOOT PAVEMENT, FLOORING, COVERING OF ARCHES, TERRACES, VIADUCTS, TUNNELS FOR RAILWAYS, &c.

MANUFACTURED ONLY BY ORSI AND ARMANI.

OFFICES—6, *GUILDHALL-CHAMBERS, BASINGHALL-STREET.*

WORKS—*(CUBITT'S WHARF) MILLWALL, POPLAR.*

IMPORTANT TO RAILWAY AND STEAM NAVIGATION COMPANIES, MANUFACTURERS, AND ENGINEERS.

W. BROTHERTON AND CO.'S

PATENT LUBRICATING FLUID (or Animal Oil) FOR ALL DESCRIPTIONS OF MACHINERY.

W. B. & CO. have the pleasure to state, that the above article is extensively used in her Majesty's Steam Navy, and by several of the principal Steam Navigation and Railway Companies, and is pronounced by them, and by the first practical engineers of the day, to be far better adapted for the purposes of lubrication than any other article hitherto used for such purposes. The Patent Lubricating Fluid is equally applicable for the most intricate and fine pieces of machinery, as for the heaviest bearings of the steam-engine. It is cheaper, much more economical, and cleaner than oils at present in use; is free from smell, and calculated to effect a vast saving in the expenditure of working steam powers.

Further particulars can be had, and testimonials seen, by application to the manufacturers, W. BROTHERTON & CO., Hungerford Wharf, Strand, London.

N.B.—The above article will burn in lamps, and give a light equal to the best sperm oil.

OFFICE FOR PATENTS, 7, STAPLE INN, HOLBORN.

J. MURDOCH (successor and late assistant to Mr. Hebert)

Informs INVENTORS and PATENTEES, that, at his OFFICE, they can obtain

REFERENCE TO A CLASSIFIED LIST OF PATENTS,

(THE ONLY ONE EXTANT), which shows at one view all the Patents ever granted for any particular object, whereby they may save much trouble and expense, and procure information not otherwise obtainable. BRITISH and FOREIGN PATENTS OBTAINED, and USEFUL and ORNAMENTAL DESIGNS REGISTERED.

SPECIFICATIONS carefully prepared, and REPORTS of ENROLLED SPECIFICATIONS furnished on moderate terms.

FINISHED and WORKING DRAWINGS executed with accuracy and dispatch.

RESEARCHES ON REFRACTORY SUBSTANCES,

AND THE RESULTS FURNISHED THEREFROM, FOR THE USE OF MINERALOGY, GEOLOGY, AND METALLURGY, AS WELL AS THE ARTS OF PRECISION AND SCIENCES OF OBSERVATION. By M. GAUDIN.

[Proceedings of the Paris Academy of Sciences, Jan. 24.]

Having had entrusted to my care, on different occasions, very powerful blow-pipes, I have submitted, to the judgment of the Academy, the results which I have obtained by their means; but until the present time I have not discussed the uses which might be made of the application of these results.

In 1836, I endeavoured to form rubies of all sizes; my process consisted in submitting to the flame of the oxy-hydrogen blow-pipe ammoniacal alum, to which had been added a few traces of chromate of potash. I obtained by this means melted globules, composed of alumina and oxide of chrome, having all the characters of oriental rubies. I constructed my crucible with calcined lamp-black, rendered compact by pressure; my blow-pipe formed a flame, which reached from the top to the bottom, in such a way, as to heat the gases before they passed out; in one word, the construction and dimensions of the blow-pipe were such as to give it the fullest possible amount of power. This blowpipe, which had cost 100*f.*, weighed almost four pounds and a half. The principal body of the apparatus was composed of two concentric cylinders, with a common foundation, weighing 22 pounds. The exterior cylinder was 2¼ inches in diameter, and 2¼ inches in height. The other common foundation was formed by a disc, screwed to the inner side of the large cylinder. This disc was pierced with three holes—one in the centre, and the other two corresponding to each other at the annular space comprised between the two cylinders. At each of these orifices was adapted a tube of 5½ inches in length, drilled into a bar of platinum. These tubes were fitted with such great precision, that the apparatus, though of the length of 7½ inches, was perfectly connected, without a particle of solder; lastly, three platinum tubes, soldered with gold, completed the blow-pipe, and served to suspend it by means of iron-wire. The lower front was pierced with from 50 to 60 holes, as large as the point of a pin, for each gas; and these holes were pierced obliquely in the same direction, to impress on the flame a movement tending entirely to displace the matter in fusion. I worked this apparatus only a few times; the gasometers were not large enough, as they contained only about 500 quarts of gas. Nor could I procure ivory-black sufficiently pure or compact. By the action of the fire the crucible split, and the rubies falling among the broken pieces, defied the flame to touch them; this is the reason why I made at one operation five or six rubies, the size of a grain of corn, against one only as large as a pea. In a word, with this apparatus well served, we ought to produce rubies as large as small nuts. When the blow-pipe was in full activity, its body was heated to a bright red; and whilst the rubies were moving to and fro, against the dazzling sides of the crucible, so intense was the heat radiated, that the frame of the blue spectacles I wore during the operation burnt the skin of my face. With a blow-pipe of much less power, I had previously obtained a limped globule as large as a pea, by operating in potash alum without any addition, but this globule once cold, crystallises, possessing all the characters of alumina, hardness, brilliancy, &c. Mr. Dufrenoy even recognised the *sixtuple change of corundum*. I consider, therefore, that I have a right to claim the priority of the "production of crystallised precious stones, and of the process of mixing these bodies in the state of salts, whence arises a separation by heat of the volatile matters, and the obtaining the residue in the state of an intimate admixture." On the 19th of June, 1837, I presented to the Academy a note on this process, accompanied with specimens,—some crystallised, the others cut with a diamond in all their facets. The opinion of the lapidary, the remarkable analysis of M. Malaguti, and especially the report of MM. Berequene and Berthier, pronounced that these rubies possessed all the properties of the natural precious stones, except their limpidity; and it is precisely this determined crystallisation of alumina, which is the great obstacle in preventing the manifestation of this precious property. During the experiments of the commission at the School of Mines, M. Regnault placed a small piece of quartz in our crucible of lamp-black; we melted it, and I remarked at the time that it was viscous—whilst alumina, on the contrary, is always very fluid or crystalline; and I then formed the project to draw out the rock crystal, and after several attempts I succeeded in spinning the rock crystal as readily as a thread of glass. I remarked, also, that it was very volatile,—a fact which M. Cordier has found of importance in his geological investigations.

In the memoir which I presented to the Academy in 1841, I described the phenomena of the tempering of the rock crystal, the threading of silex, beryl, garnet, &c. To this present memoir, I subjoin rods of rock crystal and freestone; six lenses of melted rock crystal, of from 60 to 200 diameters, and also rubies, made by means of my small ether blow-pipe. With one of these rubies, M. Gindrax has formed a pivot-hole for a chronometer, and he declares, that it appeared under the diamond as if it were an ordinary ruby. In conclusion, I am happy to announce, that it appears to me very practicable to melt rock crystal on a large scale, for optical purposes, as well as rubies, in crucibles of lime, covered with carbon, of which I have already described the fabrication, by two different processes for the melting of platinum and its alloys.

CYLINDER-BORING MACHINE.

In our report of the meeting of the Institution of Mechanical Engineers, in last Journal, we noticed the reading of a paper, by Mr. C. Beyer, "On the Fitting-up of Cylinders for Locomotive Engines, and a Description of a Machine for Boring them."—We copy the following notice of the invention from our contemporary, the *Railway Chronicle*:—"The desirableness of having all the cylinders of every class of locomotive engines perfectly alike, so that they may, at any time, be changed in case of accident, or be replaced by spare ones, it is presumed will be admitted by all; the difficulty of accomplishing this with the tools hitherto employed, will be known to most who are engaged in this branch of the business. These considerations, and the defect of cylinders, the author, from time to time, found necessary to have rectified before passing them to be used, induced him, in 1843, to direct his attention to the boring-machine. The conditions which a good cylinder boring-machine should fulfil, may be stated as follows:—1. That it should make the cylinder perfectly round in its diameter, and parallel in the direction of its axis.—2. That the bored inside should be perfectly concentive or parallel with the outside of the barrel.—3. That the projections beyond the flanches, if there be any, should be true with the internal bore; and, 4. That every strain or pressure upon the barrel of the cylinder whilst boring should be avoided. The boring-machine hereafter to be described, has been found, during several years' practice, to have answered these conditions. Messrs. Sharp, Brothers, & Co., cast their cylinders from wood patterns in green sand, and commence the process of fitting-up by describing or gauging off a circle upon each end of the cylinder, concentive to the barrel; and having formed this circle, the ends are bevelled inwards by chipping to an angle corresponding to that of the plates of the cone mandrill. The cylinder being fastened to the mandrill, is put into a two-foot slide lathe, with facing motion, and has its ends faced to a gauge, and its projections turned to a gauge, and cut to a length to guage. There are further two notches, cut out of two cone discs, so as to allow of applying an internal guage, for the out-and-out length of the cylinder. Thus prepared by turning, it is removed to the boring-machine, inserted between two plates, the faces of which are planed, and the holes for receiving them bored from the boring-bar in their places; it is at once perfectly concentive with setting, and needs nothing but clamping to the plates, by headed bolts or clamps by its flanches, to be ready for commencing boring. For placing the tops of the steam-chests and valve facings, the turned ends are again made use of for setting, by placing upon the planing-machine table brackets, placed on their faces and bored out to the same gauge; the cylinder is turned to, in order to ensure the parallelism of these parts with the axis, as for similar reasons the inside of the cylinder could not be otherwise than concentive with the outside of the barrel. I prefer making a separate set of gauges, tackling, &c., for each size of cylinders, rather than economize by making one do for many, and risk the chance of mistakes; and believe that the plan here described, to work always from the same point, is most likely to ensure accuracy, as the faults made by neglect of workmen are not multiplied by subsequent operations. The boring-machine bores by two cylinders at the same time, and is arranged to bore cylinders of 2'6" stroke, and from 10 to 20 inches diameter. The bed is that of a common slide lathe, sufficiently long to carry a double set of driving gear, and admits of a sufficient traverse of the boring-carriage. The boring-bar is supported by three bearings—the former of which is stationary, and firmly fastened to the bed, to resist the end and pressure of the cub when boring; the latter are fixed upon the carriage, and travel with it along the boring-bar, and serve for securing the cylinder during boring, as will be shown hereafter. To cause the boring-carriage to move endways, a train of wheels descend at the back of the machine, to give motion to the shaft, and is transferred by means of a feathered worm to the worm wheel and pinion, both of which move loose above the fast stud of the carriage. This same stud serves as a fulcrum for the lever, carrying upon opposite projections the intermediate pinions, which gear into the stud pinions. It will be clear, therefore, that by setting the lever in such a position, as to bring one pinion into gear with another pinion fast on the rack-pinion shaft, motion will be given to the boring-carriage in one direction; and in an opposite or contrary direction by moving the lever, so as to bring the pinions to gear with each other; and this carriage will be stationary or independent of the driving gear altogether, by keeping the lever in its middle position. The rack-pinion shaft is extended towards the front of the machine, to work the carriage by hand, when putting in or taking out the cylinder. A provision is also made in the train of wheels, for varying the traverse of the carriage, by changing the pinion. To hold the cylinder while boring, the top of the carriage is formed into a kind of square frame, by means of two plates, planed on the inside, and fastened to the sides of the bearings or standards and two cross stretchers. These latter are also placed upon their inner faces, and are secured to the sides and top of the boring-carriage, and have holes bored in them when secured in their places, by means of the boring head upon the bar, corresponding in diameter to the turned projecting ends of the cylinder to be bored. It will be seen, therefore, that if the figure of the cylinder to be bored, be turned to the same gauges as the holes are bored to, it needs only inserting and clamping fast by the T bolts, to be ready for boring, without requiring any setting in its pan whatever. One of the cross stretchers is a fixture, whilst the other is removed every time a new cylinder is to be fixed. The boring head is a fixture upon the bar, and has only one plain square tire for boring ground, to cut either way. This tool fits into a planed recess, made slightly dovetailed, and is held fast by a set screw, and easily adjustable to any diameter by another of these machines. We employ three of these machines—two double ones and a single one, and one man attends to these and the lathe, for facing and turning the ends of the rough castings of the cylinders. The cylinders are cast as hard as we are able to cut them, with the best cutting tools we can make, and we find it more advisable to complete the boring in three cuts; the first is often as much as three-fourths of an inch in depth, the second we leave about one-eighth of an inch, and the third can hardly be called cutting, but is merely clearing up or finishing. The advance, or traverse, we rarely change, and is set to one-fourth of an inch for each revolution of the boring-bar; or is, for quickest speed of the bar, 3 revolutions per minute; in the second, 1'8 revolution per minute; in the third, or lowest speed, 1'2 revolution per minute. For boring 15 in. cylinders—for roughing out, 1'8 revolutionsper minute, or cut at 7 feet per minute; for boring, 3 revolutions per minute, or cut at 11'78 feet per minute; and for finishing, 1'2 revolution per minute, or cut at 5'65 feet per minute.—Mr. CRAMPTON said, they should be doing very great injustice to the very valuable paper they had heard read, were they to discuss it at that late hour, and he should propose, that the further consideration of it should be adjourned till the next meeting, which suggestion was adopted."

ADVANTAGES OF RAILWAYS.—At one of the meetings of the shareholders in the York and North Midland Railway, Mr. Hudson said that a saving of 40,000*l.* a year had accrued to the inhabitants of York from the construction of railways. This assertion derives confirmation form the striking fact that, during the last year (1847), 1,000,000 of tons of coals have passed along the Newcastle and York line.

ACCIDENTS.

Awful Colliery Explosion.—Another of those frightfully sudden catastrophes, which are unfortunately of such frequent occurrence in our coal mining districts, took place on Wednesday last, about 6 o'clock A.M., at the Heathfield Colliery, Messrs Salter and Raybould lessees. The details of which are as follows, and which are believed to be accurate we extract from the *Birmingham Advertiser*:—"At the hour named, seven men, who had been working in the mine during the night, were replaced by 29 others, but soon after this relay of day-men had descended, an explosion of carburetted hydrogen took place—the vapour arising from which blazed out of the mouth of the pit above the frame-work, and occasioned a shock that was felt throughout the neighbourhood. Six or seven of the men succeeded in making their escape through the gate-way leading into the Lewisham Pits, where they safely ascended the shaft, and were landed from the skip, and enabled to communicate, at Messrs. Salter and Raybould's office, the dangerous position in which those were placed who were left behind. It was then ascertained at the Heathfield Colliery, that the force of the explosion had snapped the rope to which the skip was attached, within 50 yards of the mouth of the pit, on returning from taking down the last load of men. After some delay caused by this circumstance, the roads were explored, and the mangled carpses of three colliers were brought up, followed by 12 others, many of whom presented a most frightful appearance from the injuries they had received about the head, neck, breast, and hands; particularly the latter, attributable, it is supposed, to the efforts made by the men to free themselves from their clothing: 13 other colliers escaped without sustaining injury of any kind. Five horses were also reported to be killed. Of the 12 who escaped with their lives from the consequences of the explosion, two are so dangerously burnt that they are not at all likely to recover; one has also a scalp wound occasioned by some of the coal disturbed in the explosion falling upon him, and the other an extensive contused wound on the leg, arising from the same cause. The men are under the care of DR. Dickinson, of the Terrace. At five o'clock yesterday afternoon there was still one man missing, and it was expected that he would be found buried beneath the masses of coal that are invariably displaced from their lodgments in the mine by occurrences of this kind. The explosion is variously accounted for. By some it is attributed to atmospheric causes. The lessees of the colliery contend that they had previously no reason to apprehend any danger from an accumulation of fire-damp; although, we believe, that the immediate cause of the catastrophe was, that Charles Hortin, the man not yet discovered, held a lighted candle too near some portion of (what the result proves was) inflammable matter. We were told, however, a fact of great importance—namely, that there was neither any safety-lamp in the pit, nor had the pit been tried by the doggy, as was both customary and necessary prior to the day-men descending to their work. The three men who were killed were conveyed to their homes; and G. Hinchliffe, Esq., coroner, has appointed Friday as the day on which a judicial investigation will be made into the circumstances attendant on their deaths. The inquest will be held at the Dartmouth Hotel. The names of the deceased men are—John Lowe, Robert Harper, and Henry Broadway. The latter was a married man. The names of the other sufferers are—John Casetty, Richard Bullock, William Noak, Walter White, George Bird, J. Taylor, William Johnson, James Shudely, John Grice, Joseph Harford, Absalom Sleater, and P. Taylor. The last two named are the persons whose lives are despaired of. Prior to the inquest, we understand that some scientific men will be engaged in a minute examination of the pit, under the authority of the coroner. It may be necessary to state that, although the pit is the property of the Earl of Dartmouth, he has no connection with the working of it; and that, on intelligence of the explosion reaching his lordship at Sandwell Hall, he manifested that sympathy and kindness which invariably characterise the conduct of the noble earl. Heathfield Colliery is the same in respect of which Mr. Caddick, solicitor, obtained an injunction, some time since; and also from which a charge originated against the lessees—Messrs. Salter and Raybould, of stealing the mine (see *Mining Journal*, Jan. 29.) This charge was originally fixed to be heard at the next Stafford Assizes; but a rule *nisi* having been obtained upon application of a writ of *certiorari* to remove the trial to the Court of Queen's Bench, negotiations have taken place, which are likely to lead to some amicable arrangement being effected between the parties. Notwithstanding the continuance of a very bleak wind, and heavy fall of rain, the news of the above occurrence attracted a large concourse of spectators to the spot, and the embankments of the pit were crowded during the day by persons, many of whom were drawn thither by rumours of the most exaggerated description. Since the above was received, we understand that 3 out of the 12 injured men are dead, leaving wives and numerous children; their names are A. Sleater, J. Casetty, and R. Bullock; two others, it is expected, cannot survive. The body of Charles Horton, the man who first fixed up his lighted candle against the coal, and caused the explosion of the hydrogen gas, was not discovered until eight o'clock last evening, having been buried beneath an enormous mass of coal, which had fallen at the time the gas ignited. His body, when found, presented a frightful appearance, being crushed to pieces—so much so, that it was with great difficulty removed to where he formerly resided. The exact cause of the melancholy affair has not yet transpired, nor will it until the inquest, which takes place to-morrow, before G. Hinchcliffe, Esq., is held. The accumulation of fire-damp was, no doubt, caused by the roughness of the weather during the last few days. We are sorry to say another explosion, though not attended with any fatal result, took place in a pit situated on the moors, about a quarter of a mile from the Heathfield Colliery. Two men were severely burned, and one had his thigh broken.

Wheal Franco.—As J. Hodges, having finished his work, was ascending the shaft, he accidentally slipped, and fell to the bottom, a depth of 120 feet.

Top Patricroft Colliery, Wigan.—A miner, named Rowe, had a very providential escape from a shocking death on Thursday last; he had just hooked on a basket of coals, which was in its progress up the shaft, when he happened to look up, and perceived a large "cob," which had slipped from the basket, falling down. Rowe attempted to run under the hollows, but, in doing so, the coal caught him on the hip, which it mutilated in a shocking manner. At first but faint hopes were entertained of his recovery—now, we are happy to say, he is doing well.

Millfields, near Bilston.—As C. Robins, 10 years of age, was playing on the pit bank, belonging to Mr. Ryley, he fell down the shaft, and was killed.

Buckley, near Mold.—An awful accident occurred in this colliery on Tuesday week; as two of the men were at work, the roof fell in, and killed them on the spot: they were so firmly imbedded in the rubbish, that blasting was necessary before the bodies could be got. In the same mine, on the same day, a man was killed by an explosion of fire-damp.

White Lee, near Crook.—John Grey was unfortunately crushed to death by a tub, in Mr. Pease's West Colliery.

Walsall.—J. Ramsall was killed by falling from a scaffold, which had been erected to enable him to put a bucket in the pump, in a pit belonging to Mr. Joseph Smith, at Bloxwich. W. Vaughan, the engine-man, was assisting deceased at the time, and also fell from the scaffold, but fortunately caught hold of a projecting part, and was saved.

Wednesbury.—On Thursday night, the 3d inst., between 11 and 12, E. Cornwall was at work in Mr. Baylis's colliery (where also two other men and a boy were employed), and whilst cutting into an old hollow, excavated some years ago, a quantity of dirt fell upon him, and, before he could be extricated, he was suffocated by the foul air.——J. Rose fell down one of Mr. Walker's pits, and was killed.

Somercotes, near Alfreton.—As J. Bridget, aged 72, was working in a colliery here, a piece of coal fell upon his body, crushing him so severely, that he expired in a few hours.

Staveley Netherthorpe.—As W. Johnson was working at the bottom of a shaft, the chair used for drawing up the coals was let down too low, and it struck him with such violence on the head, that but slight hopes are entertained of his recovery.——On the following morning (Wednesday), as I. Ball was working in the same pit, a quantity of bind fell upon him, and injured him very severely.

A similar accident happened on Thursday, at Hady Ironstone Pits, to a young man of the name of Wright, whose father resides in Castle-yard, Chesterfield.—*Derby Reporter*.

Burnley, near Blackburn.—J. Holland was killed in a mine at Ighten Hill Park; he was standing on the second landing of the shaft, when he missed his footing—was knocked over, and fell to the bottom of the shaft, about 21 fathoms.

Newfield Colliery.—M. Flynn was killed by a large mass of ironstone falling upon him.

THE SAFETY-LAMP.—At the meeting of the Geological and Polytechnic Society of Yorkshire, on Thursday, the Rev. W. THORP read a paper "On a New Safety-Lamp, affording three times as much light as the Davy lamp, and quite as safe in the fire-damps of coal mines." The chief defect of the existing lamps was an insufficiency of light, which induced the workmen to withdraw the protecting wire-gauze, or substitute a naked candle. An argand burner with a glass chimney met this difficulty, and prevents any elongation of the flame, from a more perfect combustion of the carbon. It is safe too in blowers of gas and currents, and is superior to Bonner's series of Wicks, or Upton and Roberts's glass shade, as giving a greater amount of light, and less liability to be broken in the mine.—The Rev. J. BATEMAN (chairman), inquired if the application of a glass chimney would not be fatal to Mr. Thorp's invention, from the continual danger of its being carelessly broken.—An interesting discussion followed, in which Messrs. Biram, Morton, and others took part.

PRESENTATION TO DR. CLANNY.—On Thursday, a testimonial of merit and esteem was presented to Dr. Clanny, of Sunderland, in the Athenæum in that town. The testimonial consisted of a large silver salver, bearing an appropriate inscription, and a purse, wrought of gold thread, containing 100 sovereigns—the whole the produce of a subscription which realised nearly 200*l.* The presentation took place in the library room, in which a numerous and respectable company assembled.—The Rector of SUNDERLAND was called to the chair, and Dr. GLOVER, of Newcastle, presented the testimonial.—The doctor adverted to Dr. Clanny's claims as the originator of the safety-lamp; and whilst admitting that Sir Humphrey Davy and Mr. George Stephenson are entitled to great merit, contended that Dr. Clanny is entitled to the praise of having first conceived and carried into effect the construction of a safety lamp. He also referred to Dr Clanny's estimable qualities as a man, and his merits as a medical practitioner, particularly alluding to his researches on gas and the blood, which he said had earned for him a name that will not die.—Mr. RENNIE embraced the opportunity of stating what he knew relative to the origin of the safety-lamp, and corroborating Dr. Clanny's claim to the priority of the invention.—Dr. CLANNY, responded in suitable terms, thanking the various parties who had taken an active part in the proceedings, and speaking of the origin and progress of the safety-lamp.—*Newcastle Advertiser*.

IRONFOUNDER'S ESTIMATES.—As a proof that ironfounders are not more particular in the preparation of their estimates than some builders, we publish the result of a competition for a cast-iron bridge, of 35 ft. span, proposed to be erected in the city of Chester, from the design of Mr. Baylis, borough engineer:—J. Williamson, Stockport, 220*l.* 10s.; W. Mabon, Ardwich, Manchester, 212*l.* 11s. 3d.; Teyburn and Co., Warrington, 210*l.* 15s.; W. Glasgow, Manchester, 180*l.*; R. Pauling, Manchester, 178*l.* 10s.; Juland and Longdon, Manchester, 170*l.* 13s.; Ogle and Son, Puston, 150*l.*; Messrs. Johnson, Chester, 149*l.* The lowest tender was accepted.

MAUGHOLD IRON MINES, ISLE OF MAN.—We are happy to hear that good hopes are entertained of a speedy and plentiful supply of ore. From the enterprising spirit of their proprietor, we doubt not that no means of proof will be left unexercised throughout the parish.—*Liverpool Mercury*.

CONWAY BRIDGE.—On Friday last, about midnight, an accident occurred at the railway bridge works, which might have been attended by a serious loss of life. While a number of men were in the act of hoisting a large cast-iron beam, of about 13 tons weight, by means of a crane erected on the top of the masonry work, the arm of the crane gave way when the beam was near the top, and both fell to the bottom, breaking two other iron beams which lay there, and otherwise damaging various materials. The men fortunately escaped unhurt.—*Liverpool Mercury*.

Proceedings of Public Companies.

MEETINGS DURING THE ENSUING WEEK.

This Day—Copper Miners of England Company—offices, at Two.
Taw Vale Railway and Dock Company—London Tavern, at Twelve.
Harrowbarrow (Old) Mining Company—offices, Plymouth, at Twelve.
Monday—London Gas-Light Company—Freemason's Tavern, at Twelve.
Tuesday—Devon and Courtenay Consols Mining Company—Central Hall, Plymouth, at Twelve.
Gaspe Fishery and Coal Mining Company—offices, at Two.
Standard Life Assurance Company—offices, Edinburgh, at Three.
County Fire Insurance Company—offices, at One.
Ceylon Railway—offices, at One.
Wednesday—United Hills Mine Company—offices, at One.
East Anglian Railway Company—London Tavern, at One.
Mutual Life Assurance Society—King's Head, Poultry, at Twelve.
Thursday—Tincroft Mining Company—offices, at Two.
Northern Counties Union Railway—London Tavern, at Twelve.
Great Western Railway—Paddington Terminus, at Twelve for One.
Northern and Eastern Railway—offices, at Two.
New South-Western Steam Navigation Co.—Nine Elms Station, at Four.
Friday—Demerara Railway—London Tavern, at One.
London and North-Western Railway Company—Euston Station, at One.
Church of England Assurance Company—offices, at Twelve.
Provident Clerks' Mutual Benefit Association—London Tavern, at Six.
Saturday—Birmingham and Oxford Railway—Dee's Royal Hotel, Birmingham, at half-past Two.
Birmingham, Wolverhampton, and Dudley Railway—Dee's Royal Hotel, Birmingham, at Twelve.
Buckinghamshire Railway—Euston Station, at Two.
East Indian Railway—London Tavern, at Twelve for One.

[*The meetings of Mining Companies are inserted among the Mining Intelligence.*]

COMMERCIAL BANK OF LONDON.

An extraordinary meeting of this company was held at the bank in Lothbury, on Tuesday last, for the purpose of electing three directors, in the room of Messrs. Rennie, Cornfoot, and Shewell, resigned.

John Taylor, Esq., in the chair.

Mr. Cutbill, the manager, read the advertisement convening the meeting.

The Chairman stated that, as this was not their annual meeting, there would be no statement laid before the proprietors on the affairs of the bank. When they had got through the business of the election, he should be very glad to make a few remarks.

Mr. Barnwell (a director) said, that, in accordance with the object of the meeting, explained to them by his friend, Mr. Taylor, he had great pleasure in offering for their election, as director of this bank, a gentleman of independent means, active habits, and extensive connections. He could assure them, that this gentleman would, and had been always anxious to, contribute all the advantages of his position, to attain that result which they all equally wished, and in which they were all equally interested, by making this bank what it ought to be, and which it assuredly would be, if their kind support, and the same caution on the part of the directors, continued—namely: a great, useful, and flourishing establishment. (Hear.) Under the conviction of aiding in the accomplishment of that result, he would now submit a resolution, that Mr. Charles Dickson Archibald be elected a director of this bank, in the room of Mr. Shewell, resigned.—The motion was seconded, and passed unanimously.

Mr. Hopkinson (a director) moved, that Mr. William Cooper be elected a director, in the room of Mr. Cornfoot, resigned. He would just mention, that Mr. Cooper was a gentleman well known to many in the City, and he was confident that he would become a great acquisition to them as shareholders.—The motion was seconded, and was passed unanimously.

Mr. W. Cooper returned thanks, and said, he thought that every shareholder, in his own sphere, might considerably forward the interest of this bank, for they could not expect that the directors only could ensure its prosperity. Much, he thought, must depend on the shareholders, who might reasonably be expected to help the directors in the best way they were able, which would be by using their advice or interest to induce others to open accounts with us. With this support, he thought they would soon become in a still more favourable position.

Mr. George Rennie, jun., observed, that having received an appointment, which compelled him to go to another hemisphere; he could no longer offer his services to the proprietors. After so many years of acquaintance, it was a satisfaction to him to be able to state, that he now left the concern in a state of prosperity, and he had no doubt it would continue to be managed with the same prudence, discretion, and efficiency. (Hear, hear.) He would propose, that Mr. John Alfred Chowne be elected a director in the place of himself, resigned.

Mr. Clay, M.P., seconded the motion, which was agreed to unanimously.

Mr. Archibald and Mr. Chowne returned thanks.

The Chairman said, he had great pleasure in stating to the proprietors, that the progress of the bank had been very satisfactory since they had the pleasure of meeting them at the last annual assembly in July; the time they had passed through had been a very difficult and a very portentous one. He supposed, that at no period had such remarkable changes happened in the value of securities, and every sort of property, as had occurred, more particularly in the last four or five months of the past year. During that year, they had Consols at 94, and they had them at 79—they had Exchequer Bills at 15 and 20 premium, and they had them at 37 discount. All the great articles of trade, such as sugar, cotton, indigo, and others, declined in value at least 25, and some of them 40 per cent. Under these circumstances, of course, the management of a bank required particular caution. He (Mr. Taylor) was happy to say, however, that at no period, even in October or November, did their balances diminish to a greater extent than about 10 per cent. of the average amount at which they were during the last year. He had also the pleasure of stating that, during the last half-year, their gross profits were as large as in 1846, although their balances were somewhat less; but still the higher rates of interest made up the difference. (Applause.) It could not have been expected but they should have met with some losses during the disastrous year they had gone through; but it was gratifying for him to state, that these losses were not important; and that the bad debts had been much less than might have been expected, considering the times, and the large amount of business now done by the Commercial Bank of London. (Hear, hear.) In one respect, they had been fortunate enough to foresee in some measure the coming pressure; but he did not pretend to say, that any of them foresaw its extreme intensity. The directors, in the early part of September, sold a considerable portion of their Exchequer Bills, and of their stock, in order that they might be prepared to meet any demands that might come upon them, and, at the same time, to give that accommodation and assistance to their friends to which they were entitled. They were so fortunate as to replace all that stock at considerably less price than they sold at; consequently, they had, instead of any loss on the sale of their stock, been enabled to add something to the profit and loss account. (Applause.) In conclusion, he would state that, since the beginning of the year, their progress had continued to be equally satisfactory—for, during the month of January only, they had opened 50 new accounts. He trusted this short statement would be satisfactory to the proprietors; and that they would consider that he had not unnecessarily occupied their time. (Hear, hear.)

Mr. Clay, M.P., begged to move a vote of thanks to the chairman for the very efficient manner in which he had discharged his duties on that occasion, and also to the directors.—The motion was seconded and passed unanimously.—The meeting then adjourned.

American Gold Pens.—An active competition in the manufacture of gold pens has brought down the price from $10 to $1 or $2, according to the finish; and, as might be expected, they have got into very general use. A New York correspondent of the *Charleston Courier* has given, in one of his late letters, an interesting account of the invention of gold pens, and the manner in which they are made, a portion of which we subjoin:—The first pen of the sort ever used was in 1838. The idea of the utility of gold for the purpose was conceived by the Rev. Mr. Cleveland. He communicated this idea to Mr. Brown, who improved on it, and immediately went into the business. He was followed by some half-dozen others. Bagley is now the most extensive manufacturer of the article, and he employs in it a capital of $80,000. His expenses are $1000 per week. Platt and Brothers, in the early stage of the manufacture, made a contract with Brown and Bagley for all the pens they made, and thus had the monopoly of the market for three years. They sold $75,000 per annum of this article, nearly one-half of which was profit. Bagley then went on; and has made a rapid fortune. His pens rank the first in the market, although Brown's, and the "Richelieu" pen made by Watson and Co., are equally good. In the manufacture of pens, the gold is first rolled out in ribbons, and then cut with a die to the required shape—the points put on, and then ground down to the required nib. The point are irridium, a new metal formed with platinum. The points are all imported generally, without the ceremony of an introduction to the custom-house, and cost from $7 per oz. The pens and cases sell from $10 to $30 per dozen. The manufacture of silver cases is a distinct business, and employs a large capital. It is not easy to make an estimate of the number of pens manufactured per annum, but it is not probably less than 1,000,000, of which Brown and Bagley make about one-half. A person who had not thought of the subject, would scarcely suppose that 800 lbs. weight of gold were used up every year in the manufacture of such a trifling article as pens, a business unknown 10 years ago—yet such is the fact. The demand for the article is enormous, and it is now difficult to find a person who writes at all unprovided with the most economical of all pens. One export of 1000 has been made to England, where they sell for a guinea each.—*American paper.*

A party of miners from the neighbourhood of Gwennap, for Chili, sailed from Penzance, on Tuesday, in the *Cornwall* steamer, for Bristol, and thence will proceed to Swansea, from which place the barque *Jenny Jones* will convey them to their port of destination.—*Penzance Journal.*

Transactions of Scientific Bodies.

MEETINGS DURING THE ENSUING WEEK.

This Day—Royal Botanic—Inner Circle, Regent's-park ... 3½ P.M.
Monday—Geographical—3, Waterloo-place ... 8½ P.M.
Medical—Bolt-court, Fleet-street ... 8 P.M.
Tuesday—Linnæan—Soho-square ... 8 P.M.
Horticultural—21, Regent-street ... 3 P.M.
Civil Engineers—25, Great George-street ... 8 P.M.
Wednesday—Society of Arts—Adelphi ... 8 P.M.
London Institution—Finsbury Circus ... 7 P.M.
Microscopical—21, Regent-street ... 7 P.M.
Thursday—Royal—Somerset-house ... 8½ P.M.
Antiquaries—Somerset-house ... 8 P.M.
Friday—Geological—Somerset-house ... 1 P.M.
Royal Institution—Albemarle-street ... 8½ P.M.
Saturday—Westminster Medical—17, Saville-row ... 8 P.M.
Asiatic—14, Grafton-street ... 2 P.M.

INSTITUTION OF CIVIL ENGINEERS.

Feb. 8.—Joshua Field, Esq. (President), in the chair.

The paper read was "An account of the recent Improvements in the Drainage and Sewage of Bristol," by Mr. James Green, M. Inst. C.E. From this account it appears, that for many years past great reformation had been requisite in the sewage of several parts of the city of Bristol, and more especially in the localities adjacent to the course of the River Froome, whose channel had become a large cesspool, spreading miasma and disease all around. This river formerly emptied itself into the River Avon, in the city; and then all that was brought down by the stream was carried away by the tide; but, when to form the floating harbour, the old course of the Avon was dammed across by lock gates, and a new cut was made for carrying off the contents of the sewers emptying themselves into the Froome, a nuisance of the most serious character was created, and the bed of the river became permanently affected. Mr. Myine, some years since, constructed a lateral culvert from the *embouchure* of the Froome, *debouching* in the new cut; this did partial good; but still the general state of the river remained unimproved; and, in deference to the universal demand for sanitory reform, the authorities of Bristol employed Mr. Green to devise and execute plans for the improvement of the sewage of the part of the city most demanding it. He laid out comprehensive plans, but the estimate of their cost exceeded the funds at the disposal of the council; so he modified them, and the result had proved most successful. The proceedings were to bring the channel of the river into an uniform width, by building side walls, with gutters in the upper slopes, conveying the sewage into the stream, obliterating the shoal, and cleaning up the bed, thus bringing it to an uniform inclination; removing the obstructions caused by the pier of the Castle Mill-street-bridge; lowering the height, and extending the length of the Wear at the castle moat, with new flood gates, &c., deepening the bed of the upper part of the stream, and thus making convenient arrangements for cleaning out and flushing the channel, and passing off the products through Myine's culvert into the new cut, whence it was conveyed away by the tide. The Dock Company's culvert was also cleansed and repaired at the same time, and brought again into operation. Many difficulties attended these proceedings, but they were skilfully combated, and the result has been most complete success; and it is to be hoped, that the further ameliorations of which the general sewage of the city is susceptible, may be equally successful under the control of Mr. Green, who has so ably conducted them upon a modified scale. For, as the actual expenditure was not more than 4537*l.*, as stated in the paper, and such beneficial effects have been obtained, there can be no reason why any proper measure of sanitary reform should not be carried into effect. In the discussion which ensued, several very able men took part, bearing testimony to the satisfactory nature of the improvements made by Mr. Green at Bristol. The conversation then turned upon the employment of the contents of sewers for agricultural purposes. The system proposed by the various companies were detailed and canvassed. The lands which had been rendered fertile by the application of liquid manure, near Edinburgh, and near Mansfield, were quoted as examples of the efficacy of the system; but, on the other hand, it was shown that these were not fair examples, as the localities were peculiar; the cost of the establishing was much larger than could usually be borne; and that, in general, if the distribution of the contents of the sewers was to be made by pipes and pumping, the returns would never repay the outlay. The question of the action of the various deodorizing fluids was treated of; but, as the time of breaking up the meeting arrived in the middle of the discussion, it was adjourned until Tuesday evening Feb. 15.

Paddle-Wheel Propulsion of Steam-Boats.—We have received a communication from Mr. Lupton, of Nelson-square, on the subject of the superiority of submerged propellers over paddle-wheels. The remarks and calculations are far too long and abstruce for our columns; we can, therefore, only call attention to the author's ideas on the subject. He contends, that notwithstanding all that has been done, and ascertained capable of being effected, it appears, that in the use of paddle-wheels, the steam-power is employed very wastefully—equal, perhaps, to three-quarters of the whole power employed; while the maximum rate of travelling obtained is still slow—say 10 miles per hour—and which any paddle-wheel steam-boat might increase, by the adoption of these submerged propellers, of from 2½ to 3½ ft. diameter. The calculations are to prove these assumptions, from which he deduces, that the 3½-ft. propeller would perform 20 miles per hour, with no lost power.

Mechanical Railway Whistle.—An experiment was made on the South-Eastern Railway, on Tuesday last, with a mechanical railway whistle, patented by Mr. Wells, of Suffolk-place. The sound of this whistle is produced by the action of a crank upon a couple of what may be termed air-pumps, 10 inches diameter, the pistons having a 4-inch stroke. The apparatus weighs about 1 cwt., and is so constructed, that the handle by which the whistle is worked can be easily turned by the guard while he is screwing on the break. The whistle was, in this experiment, fixed to an open third-class carriage, attached to the 6 h. 30 m. down Dover train. There was a strong head wind against the train, a circumstance calculated to test the efficacy of the contrivance. With the train partially shielded from the wind, and proceeding at about 20 miles per hour, the whistle was heard by the engine-driver, but where a speed of about 40 or 45 miles an hour was attained, the whistle was found not to be sufficiently powerful. But the power of the whistle can be easily increased, without adding to the weight of the apparatus; and it is probable that the patentee will, by a little attention to the mechanism of his apparatus, make it a very useful invention.

Novel Invention.—There is deposited in the Portsmouth Dockyard, a working model of a "peril indicator," to denote the approach of ground to ships and steamers—the invention of Lieut. Westbrook, R.N., of the *Stag* revenue cruiser, on the Ryde district. The apparatus is positively too simple to describe—it is fitted to the keel of the vessel, and consists of a projection therefrom of two bars 10 ft. below the keel of the vessel; immediately these bars, which are fitted forward as well as aft, touch ground, they spring up level with the keel and ring a large bell in the engine-room, which is the signal for the engineer to instantly reverse the engines, and send the ship astern. The invention has met with the approval of some of the members of the Admiralty, and every scientific, naval, or other person who has seen it. A trial would fully demonstrate its usefulness and applicability—its expense is too trivial to be an obstacle.

Important Railway Trial.—A case, which has occupied the parties interested the greater part of last week, was decided at Cork, on Monday. It was a dispute relative to the value of some property of Mr. Beare's, known as the Bruin Lodge estate, which was required by the Great Southern and Western Railway Company. The claimant demanded 15,000*l.*, the company offered 5000*l.*, which he peremptorily rejected. After a hearing of almost unprecidented length, a verdict was returned for 4250*l.*—10,750*l.* less than the claim, and 750*l.* less than the company's offer! At a moderate estimate of the expense, the plaintiff will be 1000*l.* worse off than had he accepted the original offer. It is a curious fact, in connection with these trials, that had the verdict been a shilling higher than the offer—if it had been for 5005*l.*, for instance—the company would, under the law, be liable for the whole of the costs.

Resumption of Railway Works.—The works on the Burnley branch of the Lancashire and Yorkshire Railway are again resumed, and considerable progress is reported. The Kitson Wood tunnel, near Todmorden, especially, has progressed rapidly since the contractors received orders to proceed, and, at present, as many hands are employed as can find room. The works are proceeding both day and night, and on some occasions on Sundays.

Railway Contractors' Tommy Tickets.—At the Wolverhampton Police Court, on Wednesday last, before the stipendiary magistrate, J. Leigh, Esq., an excavator, named James Wells, summoned Mr. Stephen Moore, contractor, for 14s. 3d., wages. After hearing evidence on the point, the Bench decided Wells was entitled to the sum of 11s. 3d.; this decision throwing the costs on the defendant. In the course of the hearing, it transpired that the men's wages were partially paid in provision tickets, which were honoured at a shop of Mr. Moore's, in Horsley Fields. The magistrates strongly reprobated this practice, which he observed was a breach of the spirit, if not of the letter, of the Truck Act; and, in a town like Wolverhampton, there was not the slightest necessity for resorting to such a method of payment, the object of which was too apparent.—*Birmingham Journal.*

A Horse of 100 Tons Weight—Plymouth Iron Works.—One of the blast-furnaces at these works was built at the commencement of the present century; and after having been constantly burning for a period of 45 years, the works now require repair. It was blown out a short time ago, when, at the bottom, incredible as it may appear to the uninitiated, was found a "horse" weighing at least 100 tons. Beneath the huge fire it has thrived, and so increased from year to year, that the workmen have found great difficulty in removing it. So determined has it been to make a stand in its present situation, that although the firemen have been blasting it with gunpowder for the last 14 days, it has withstood alike the influence of gunpowder and heat, as though it was girded with asbestos. At length, however, another plan has been adopted by the firemen, instead of blowing it up, they have determined to knock it down. They will excavate near it, and make a trench, into which they will topple down the monster, and thus make him go. The key to this mystery is, that this wonderful technical so-called horse is nothing more nor less than a huge mass of iron that always forms itself in the furnace. This horse has arrived at the great age of 45 years, and weighs 100 tons, and is supposed to be the largest iron cast on record.

Lead Ore in Van Diemen's Land.—We are informed that a valuable discovery of lead has been made in the mountain limestone, near Macquarie Harbour.

Improvements in Railway Wheels.—Mr. F. Chaplin, of Bishop Stortford, Herts, has taken out a patent for applying to the tire of railway wheels, belts of hide, coming in contact with the rails, for the purpose of obtaining a firmer bite. The patentee prefers ox or buffalo hide, simply dried and deprived of hair, without any tanning or dressing; this is cut into strips three-quarters of an inch wide, which are riveted together by copper rivets, forming a belt, three-quarters of an inch deep, half an inch wide, and sufficiently long to pass round the periphery of the wheel; and in joining the strips, care must be taken to break joint. A groove is made round the tire of the wheel, three-quarters of an inch deep, and half an inch wide, at that part in contact with the rail into which the belt is inserted, fitting so tight that it requires to be hammered in with considerable force. The belt is then held in its place by bolts, passing through the iron, and secured by entering a female screw in the tire. Two of these are inserted into holes two inches apart, where the ends meet, so that each bolt may pass through the strips at each end; the others are distributed round the wheel at intervals of two feet.

Progress of the Atmospheric Railway System—Lawes's Patent.—Having again inspected this model while in operation, we shall endeavour to give a more concise and popular description than that which appeared in our columns of the 29th ult. The rails, about 200 feet in length, are laid on the patentee's premises to a 4-ft. gauge, with a full size waggon, or carriage, on flange wheels of the usual description, and on the ground in the open air; the cylinder, with its piston and machinery, is erected in an out-house, and connected through the wall with a drum between the rails, around which is wound the rope, whose other end is attached to the carriage, passing along the line over suitable pulleys. The cylinder in the model is 5 ft. deep, standing vertically, and 22½ in. diameter—the piston having a 4 ft. 3 in. stroke; the area of the piston is thus 397·6—and, consequently, on being drawn to the top, and a perfect vacuum thus obtained beneath, there is an atmospheric pressure on its upper surface of 5964 lbs., or rather more than 2⅔ tons. The piston is raised by two men with a winch handle attached to it by two sets of wheels and pinions, and takes five minutes to arrive at its extreme height; the shaft is then put in gear, with the drum outside, and, the piston being set at liberty, descends with great force, winds the rope on the drum, and, consequently, sets the train in motion—obtaining sufficient momentum to carry it up half the length, which is a gradient of about 1 in 15. In practice, it is proposed to have cylinders 100 ft. long, and 3 or 4 ft. in diameter—two of which, it is calculated, will carry a heavy train two miles—the distance between the stations—at each of which would be a 10-horse power engine—the object of the patentee being to make a small engine do the work of one considerably larger, by keeping it in constant action in raising the pistons between the periods of the passage of the trains. In the prospectus it is stated, "that the principle of the plan is to create, by steam, or otherwise, in the intervals between the running of the trains, atmospheric pressure sufficient to propel the same; the power necessary for that purpose would be in proportion to the traffic on the road—a 10-horse power engine constantly at work, stationed about every two miles, would raise power enough to drive a heavy train, at any speed, every half-hour. The communication from the propelling power to the carriages would be by ropes, divided into sections of about one or two miles each; the trains would pass from one section of rope to another with any velocity, connect and disconnect without stopping, or any visible relaxation of speed; and in this manner they might be hurried on over hills and valleys, from station to station, to any distance, with perfect regularity and safety. The lines should be laid down on the natural surface of the earth, on the waste or unused parts of the turnpike-roads, where they might be worked effectually, without any interruption to the usual traffic thereon." We understand nearly sufficient money has been raised by subscription to lay down a mile, of full working size, on the banks of the Grand Junction Canal, and which is likely to be exhibited to the public in the course of the summer. The present model is exceedingly rough, and by no means calculated to show, to the full extent, the power and advantage of the system.

Improvements in Windlasses, Capstans, &c.—Every invention and improvement connected with our maritime interests, is deserving of the consideration and support of all in any way connected with commercial affairs; involving as they do so enormous an amount of capital invested in our merchant shipping interest, and in a great measure our national prosperity, possessing, as we do, the largest navy in the world. With these impressions, it was with much pleasure we lately inspected some working models of a windlass, and a capstan patented by Mr. Caldwell, and being now brought before the public by a company, under the title of Caldwell's Patent National Self-Fleeting Windlass, Capstan, and Riding Bits Company. In the patent windlass, instead of a number of levers thrust into corresponding holes in the shaft, making a continuous succession of jerks, as in the old plan, a lever is fixed in front of a serrated wheel, on the axis of the windlass. On this lever is an arm with a catch, which, on raising the lever, takes into one of the serrated teeth on the shaft, and on pulling down the lever to its greatest extent, gives the windlass a quarter turn; there is a ratchet wheel and pall as usual. There are two sets of these levers, arms, and wheels,—by which two sets of men, raising and lowering their levers, *alternately*, keep up a regular circular motion, and 60 fms. of chain, weighing 10 or 11 cwts., can be got in in 8 minutes by five men—and two men can give the heaviest ship a large or small quantity of cable as required at a moment's notice, at times when it would not be safe to veer the cable by the old windlass at all. The capstan and riding-bits are equally efficacious as the windlass, and in addition to their superiority, are some pounds less in cost than those of the old construction, while to the shareholders it is confidently estimated that a very large per centage will be returned. The capital of the company is 100,000*l.* in 5000 shares of 20*l.*,—deposit, 5*s.* per share.

Improvements in Bell Machinery.—A patent has been obtained by Mr. W. P. Parker, of Lime-street, for an improved and highly ingenious invention for the arrangement of bells in hotels, mansions, steam-boats, ships, &c., by which, whatever number of rooms there may be, one bell will suffice; and the particular room is indicated by a corresponding number appearing on the face of the machine. It would be difficult fully to describe the invention without diagrams, but a general idea may be formed from the following description. A suitable bed, or foundation plate, is made of a size corresponding to the number of rooms, in which are grooves cut in a horizontal direction; in these grooves, bars, consisting of strips of metal properly secured by studs, slide; they are connected with suitable cranks and levers, in such manner, that when pulled backwards they immediately raise a hammer which strikes the bell; and they are, on the bell-pull being released, drawn back into their places by barrel springs. On the face of the foundation plate, which is the part exhibited to view, numbers are painted, corresponding with the several rooms, cabins, &c., each covered with a semicircular piece of sheet metal, moving on a pivot in the centre of the cord of the arc in such manner, that when the circular part is upwards, the figure is covered; but when one of the bars is pulled back in the groove, it draws down the semicircular shield, and discloses the figure at the same instant the bell is struck: on being released, the bar is replaced in its original position, and the shield resumes its place over the number.

New Houses of Parliament.—There are at present 1399 men engaged upon the works of the New Palace, of which number 776 are employed at the building, 120 at the quarries, 335 at the Government works at Thames-bank, upon the joiners' works and wood carvings, and 168 upon miscellaneous works, both at the building and elsewhere.

Mining Correspondence.

ENGLISH MINES.

BARRETOWN.—In the 18 fm. level end, west of Slob shaft, we have cut a lode about 1 ft. wide, very thinly mixed with lead, taking a more northerly direction in going west than the one we have been driving on—we shall drive a few fathoms on this. The lode in the 12 fm. level end is poor, with lead thinly mixed through it; in the adit end east the lode is about 2 ft. wide, composed of gossan and lead. The tribute pitches look much the same as for several weeks past. The ore over Doyle's rather improved for the length it is working, worth 16*l.* per fm.—Feb. 4.

BEDFORD UNITED.—At Wheal Marquis, the lode in the 90 fm. level east of the sump winze, is 2½ ft. wide, and worth about 20*l.* per fm.; in this level west, the lode is about 2 ft. wide, producing saving work; the lode in the 90 fm. level, east of Hooper's winze, is 2 ft. wide, and worth 10*l.* per fm.; the engine-shaft is 5 fms. 2 ft. under the 80 fm. level; in the 80 fm. level east the lode is 18 in. wide, composed of spar and mundic, with spots of ore in places. The lode in the 70 fm. level east is at present small and unproductive; in this level west, on the south lode, the lode is 2 ft. wide, composed of spar and mundic, with spots of ore in places. The lode in the 25 fm. level, east of the south engine-shaft, is 2 ft. wide, and without alteration; and in the adit level east, in this lode, the lode is 2 ft. wide, producing good stones of tin and copper ore.—Feb. 9.

CARADON UNITED.—The reason I have not written to you before, is in consequence of having had so many difficulties to contend with. In holing to the run, in the engine-shaft, in the grass shaft, the water broke in, in such a flood, that it prevented our proceeding further in that direction. We are now driving from the engine-shaft, in the 18 fm. level, and expect to hole in a few days. In the grass shaft, we have cut a good tin branch; we have seen it 12 fms. from the surface, producing good work; and when we hole and complete the run, I have every reason to believe we shall be in a position to raise tin, to good advantage, in the 18 and 12 fm. levels. I do assure you, we have been doing all that lay in our power to get on, and I have been frequently underground, working with the men. I know such delays are expensive and perplexing to you, but much more to myself—no one knows the trouble I have had, but hope now we shall soon get over it. I have had to do with many dreadful runs in soft granite, and never, as yet, had to abandon them, until I had succeeded in securing them, and hope I shall be able to do the same here. Many such runs have been met with in some of the best mines in the county, of which I am not a stranger. I will write you again as soon as possible.

CRAIG DHU SLATE QUARRY.—No. 3 bargain is now cleared, and slates are being made from three bargains. Considerable shipments are being made, while the accounts from the quarry continue favourable.—Feb. 9.

DEVON AND COURTENAY CONSOLS.—In continuing our cross-cut north, we have intersected the lode—it is split in two parts; the south part is about 18 in. wide, composed of mundic and peach; the north part is 1 ft. wide, composed of spar, mundic, and spots of ore—the two parts are 4 ft. asunder; but as we have cut the lode exactly where it is intersected by a slide, there can be no proper definition of its real character given, until the levels have been extended on the course of it, so far as to be free of the disordered ground; the lode in the end, driving east, on the south lode, or branch, is very much improved—being at present 20 in. wide, and worth 15*l.* per fm.; the quality of the ore seems also improved; in the end, driving west, on the same branch, there has been no lode taken down this week. Our sumpmen continue to sink the shaft and cut ground for the cistern and hearers—ground favourable.—Feb. 8.

EAST CROWNDALE.—The ground in our engine-shaft is a close killas, with branches of spar and small branches of yellow copper ore, of a good quality; we have sunk in the past week 4 ft. The lode in the 47 fm. level, driven west on the north lode, does not look quite so good as when last reported on, there having been a small horse of killas found in it, which has rather deranged its appearance; in every probability this will soon wear out—it is now worth about 6*l.* per fm., and is 3 ft. wide, composed of spar, peach, mundic, copper ore, and killas. Since the rain has set in we have been obliged to suspend the engine-shaft at Rix Hill, there being such an influx of water as totally to prevent our sinking for the present; the men are now engaged in making whim round, and shall at once fix the whim, when sinking will be again resumed. The lode in the shaft is 2½ ft. wide, containing some saving work. We have commenced dressing the copper on surface.—Feb. 5.

GALLOWAY.—The lode continues with similar appearance in the shaft as last reported, except ground a little harder; under these circumstances we have considered it advisable to sink a second shaft on the course of the first lode costeaned upon, where we have a strong gossan, and the lode at full width—about 7 ft.—Feb. 5.

GREAT MICHELL CONSOLS.—The lode in the sump winze is without alteration, containing mundic, fluor, peach, spar, and ore, producing some good saving work, and is, in its general character, very promising. In the 35 fm. level, west of the sump winze, the lode, for the width of the end (4 ft.), is composed of mundic, peach, and spar, with ore intermixed throughout.—Feb. 9.

HOLMBUSH.—The 132 fm. level cross-cut, south of the diagonal shaft, is extended several fathoms beyond the perpendicular of the lode in the 120, and several branches have been intersected, but they are small and poor; in this level the lode appears to be split and disordered; we have suspended operations here for the present, and removed the men to drive the 120 fm. level south on the lead lode. The lead lode in the 120 fm. level has been cut through to the western wall, and is found to be 2 ft. wide, with a moderate underlay, on the eastern side of it there is a branch of lead, and a little mundic mixed with it, 4 in. wide; the remaining part of the lode is quartz, white prian, and spots of lead—a very kindly lode indeed; and each end at this time, north and south, is worth 10*l.* per fm. The lode in the 110 fm. level, north and south, is 4 feet wide, composed of quartz and lead, worth 10*l.* per fm.; there is still a large stream of water issuing from the lode, which, we think, is coming from the flap-jack lode; and in order to prove it, if possible, we have set the back of this level to stope by four men, and in rising, we hope to discover its source, as all the upper levels are quite dry; we have suspended the tribute pitches in the back of this level, on the western part, and have set the men to work the eastern part on tutwork, which, for the time, we think advisable. The lode in the 100 fm. level south is 20 in. wide, composed of quartz and stones of rich silver-lead; it has a more promising appearance for lead than for some time past; we have set four men to open ground eastward, on the east and west branches intersected in this level, a report of the same having been previously sent you; also, in extending the cross-cut east in this level, to prove if there be another part of the lead lode; we have intersected another branch, 4 in. wide, of spar, mundic, and spots of lead, dipping west, and the level quite dry; we think it advisable to extend it a little further; in the back of this level we have 12 men on tribute—viz: four men at 12s., and eight at 10s., in 1*l.*, on the value of the lead. In the 90 fm. level east we have intersected another part of the lead lode—it is 20 in. wide, composed of quartz and stones of lead ground; we have set it at 10s. in 1*l.*, on the value of the lead; we are also driving east in this level from another point., 10 fms. further south than the last above-mentioned, to intersect the same part.—Feb. 8.

KIRKCUDBRIGHTSHIRE.—We have resumed driving the 50 fm. level end west, the lode is about 4 ft. wide, producing stones of lead and improving. The winze sinking under the 40 fm. level, is about 10 fms. before this end, where we have a course of lead producing full 1 ton per fm. The lode in the 40 fm. level end, is about 4½ ft. wide, and producing stones of lead. The lode in the 30 fm. level end, as contemplated, is being holed to Keith's shaft, perfectly correct; we shall continue driving west in this level on the lode, producing 1½ ton of lead per fm.; and, in the meantime, fix the railroad in this shaft, to discharge stuff, with a view to resume sinking this shaft as soon as possible, as the lode is productive at this point—say upwards of 1 ton per fm.—Feb. 5.

LEWIS MINES.—The lode in the 70, west of engine-shaft, is 2 ft. wide, saving work for tin, but not rich. The lode in the 60 east is 3 ft. wide, worth 4*l.* per fm.; the lode in the 60 east, on south branch, is 2 ft. wide, worth 15*l.* per fm.; the lode in the 60 west, on south branch, is 18 in. wide, worth 16*l.* per fm. The lode in the 50 east, on south branch, is 1 ft. wide, worth 8*l.* per fm.; the lode in the 50 east, from Hick's winze, on south branch, is 6 in. wide, worth 3*l.* per fm. The lode in the 20 east from Praed's shaft, is 2 ft. wide—set at 10s. in 20s. for saving the tin. Our last parcel of tin sold for 567*l.*

MENDIP HILLS.—I have just been underground, and find the lode, in the 38 fm. level, south of the shaft, is greatly increased in size—how large it is I cannot say, as we have not yet cut through it; from present appearances, I believe we have intersected another lode, being chiefly composed of flookan, iron, and spar, intermixed with a little lead near the footwall—favourable for driving. In the slag department, I regret to inform you, we are not making that progress I could wish, in consequence of the unfavourable state of the weather; in the commencement of the past week, it became a little more moderate, which enabled us to prepare a pile of slags, and work the furnaces on Wednesday and Thursday. On the latter day, I weighed the quantity of slags consumed in eight hours' smelting, being 3 tons 14 cwts., which produced 12 cwts. 2 qrs. of metal.—Feb. 7.

NORTH WHEAL CAMEL.—*Jan.* 18.—The back of the lode is seen in different places at the surface, by shoding about 150 fms. in length, where there is a large strong gossan of a promising character, very similar to the gossan found in some good copper mines. The shaft is sunk on the course of the lode 26 fms. from surface; the first 8 or 10 fms. the lode is from 2 to 3 ft. wide, composed of gossan, quartz, and mundic, under which the gossan leaves the lode, where it is chiefly composed of a hardish quartz, and in some places bunches of mundic, with spots of yellow ore. In the bottom of the shaft a 26 fm. level is driven west about 35 fms., where the lode varies in size from 9 in. to 2 ft. wide, and copper ore interspersed throughout; in some places the lode is 18 in. wide nearly, composed of hard and friable quartz, mundic, peach, and prian, with yellow solid mundic. At the bottom of the shaft the lode is not so large as it is further west; but, notwithstanding this, as the present level is not deeper than the valley, I would advise confining your operations to sinking the same shaft 15 or 20 fms. deeper, and then drive east and west on the lode. The ground by the side of the lode, in the 26 fm. level, is a dark blue killas—I should say, favourable ground; and, being on the borders of the granite hills to the south-east, also having ample water-power to give the mine a fair trial, I would recommend your sinking the shaft immediately, as I consider the indications such as to warrant a further outlay.——*Jan.* 31.—Since the last general meeting there has been driven in the 26 fm. level west on the course of the lode about 7 fms.; the lode has been in a disordered state throughout this driving. We have driven on a south branch 1 fm. 4 ft. 6 in., but find it to be small, and at present poor; there has also been a rise put up from the back of the level 10 ft.; the lode here is of a most promising character, about 16 in. wide, containing abundance of mundic, with spar, prian, and a small portion of copper ore throughout; this rise is to the west of the cross-course, where, in driving the level a few fathoms, the lode was very promising, and of a similar character to that in the rise; from the lode not presenting itself so strong and well defined in the last few fathoms driven west, as about the cross-course a few fms. to the east, as well, as before noticed, a few fms. west of it, where it is probable the vent took place, producing the gossan that has been seen, I would now recommend your sinking the engine-shaft to a 45 fm. level, and then extend in under, and prove the lode, where looking so promising, and gone down in the bottom of the 26 fm. level; the cost for which sinking 19 fms., and driving (say 40 fms. in the 45 fm. level), with necessary pumps, rods, timber, &c., including all other costs, will be about 650*l.*

SOUTH WHEAL TRELAWNEY.—Snell's engine-shaft is in course of sinking with 9 men; ground a little harder than it has been; water just the same as it has been for some time past.—Feb. 7.

TIN VALE.—As the air is getting rather bad in Rose's (A) adit end, driving south, I have taken John Stocker and Co., to sink and rise on the middle lode, in this adit, in order to ventilate the mine, which, I think, will be completed in 10 days. In the said rise, I am happy to inform you, we have good stones of tin ore. The adit level, driving west, in Rose's adit, on the middle lode, is composed of flookan, tin, and blue capel—a kindly lode; indeed, so good, that we are opening tribute ground fastly; the lode is 3 ft. 6 in. wide, having two regular and good walls. The lode in Floyd's (B) adit is 3 ft. wide, composed of red flookan, tin, quartz, and blue capel. We are also opening tribute ground smartly in this adit. Our tributers are doing well, and working in good spirit. The grass work is getting on as fast as possible.—Feb. 9.

TRELEIGH CONSOLS.—In the 120 cross-cut, north of Christoe's, driving toward the lode west of the slide. In the 110, east of ditto, the lode is 3 ft. wide, with a more favourable appearance, and good stones of ore. In the 100, east of ditto, driving south-east on the slide to intersect the south lode, or lode on the 110 fm. level. In Garden's shaft, below the 100, the lode is 3 ft. wide, with stones of ore and mundic, and appears to be leaving the elvans. In the 100, east of ditto, the lode is 3 ft. wide, with a little ore, but more promising than usual. In the 100, west of ditto, the lode is 3 ft. wide, but not much mineral. In the 90, west of ditto, the lode is 2 ft. wide, worth 8*l.* per fm.; in the winze, below the 90 west, the lode is 3 ft. wide, worth 5*l.* per fm. In the 80, west of ditto, the lode is 2 ft. wide, but very little ore—still a promising lode for ore. In the 70, west of ditto, the lode is 14 in. wide, none taken down this week. In the 60, west of ditto, the lode is 1 ft. wide, worth 5*l.* per fm. Wheal Parent adit cross-cut north is holed to day to the engine-shaft. We expect to sample next week about 140 tons of copper ore, and are in expectation of a better standard.—Feb. 5.

WEST WHEAL MARIA.—We have suspended all our operations except the sinking of the western engine-shaft, which I have set at 14*l.* per fm. There is one thing that I hope you will bear in mind—that is, driving the cross-cut south, in the 54 fm. level, which I think we ought to drive with all speed, as there is a good lode discovered in Wheal Williams Mine, worth at least 30*l.* per fm., and which must come through the south part of our sett.—Feb. 1.

WHEAL ADAMS.—The rise in the 50 fm. level was holed to the winze, sunk from the 40, at the time mentioned in our last report; and the men are now engaged stoping the ground north, where the lode is 6 ft. wide, consisting of friable quartz and granular galena, worth 14*l.* per fm.; this is the quartzose lode with which several of the small veins, seen in the upper levels, have united—on neither of which have the 50 fm. level been driven, at least, for a length of about 15 fms.; the eastern lode is disordered, and probably destroyed by the flookan, as described in one of our former reports; it does not, therefore, reach the 50, as a cross drift, recently made, has proved. We propose making correct plans of the workings—each level to be drawn on a separate sheet of paper, as suggested by Mr. Hacket—without the assistance of which, I fear, reports will be but badly understood. The ground in the 18 fm. level cross-cut is in a compact blue slate, not congenial for lead; however, we hope soon to meet with the light blue rock, in which the western silver-lead lode has been invariably found productive. We hope to be enabled to ship the 30 tons of lead, purchased by Messrs. R. Michell and Son on the 31st ult., at 10*l.* 14s. 6d. per ton, in course of a few days. We are preparing another parcel for market; but the dressing has been much retarded during the last fortnight through intense frost and heavy falls of snow.—Feb. 9.

WHEAL TRELAWNEY.—We have commenced driving the cross-cut in the 62 fm. level (Phillip's shaft), and set to cut the lode at 7*l.* per fm., with a premium of 2*l.*, if the work is accomplished in six weeks. The lode in the 52 north, is 2 ft. wide, chiefly composed of can, with mundic and lead, worth 10*l.* per fm.; in this level south the lode is 4 ft. wide, composed of can, hornstone, hard and friable quartz, mundic, and lead, worth 14*l.* per fm.; the stopes, in the back of this level, are improved since my last report. In the 42 fm. level, north, the lode is chiefly composed of can and lead, worth 9*l.* per fm.; the stopes, in the back of this level, are looking well. The 32 north is similar to my last report; I look forward to an improvement here shortly, as the lode is large as we proceed north; the stopes here are producing a fair quantity of ore. The ground in the Trelawney engine-shaft is much as it has been—rather hard. The 22 cross-cut is much as usual. The lode in the 30 fm. level, north of Vivian's shaft, is 4 ft. wide, composed of can, gossan, spar, and lead, worth 6*l.* per fm.; the ground, in the cross-cut, extending toward the shaft, is rather hard, but I expect it will ease shortly, as it gets off from the lode.—Feb. 8.

WHEAL ANDERTON.—A great improvement has taken place in the 70 fm. level, west of shaft, and also the south wall of the lode, cut to the east of the slide in the 70 fm. level, as referred to in my last report. The lode in the 60 fm. level, both east and west, is looking very promising to be productive—various tutwork bargains and tribute pitches were set on Saturday, ranging from 4s. to 8s. in 1*l.* The engine-shaft is also set to sink under the 70 fm. level, at 8*l.* per fm. The new 12-head stamps are put to work, and are going on satisfactorily. We have resumed the dressing of tin, as the frost has entirely gone in this neighbourhood.—Feb 7.

FOREIGN MINES.

BAROSSA MINES (SOUTH AUSTRALIA).—*Angoston, June* 2.—We have (after being obliged to go to Adelaide several times) got the sett of the Greenock Mines executed, and are now opening ground by shafts, cross-cuts, and levels in the mine. I here give the names of the shafts in which we have been, and are now, working:—

Lewis's shaft, made good to the	19 fathom level.
Cocking's ditto, down	12½ fathoms.
Williams's ditto, down	12½ „
Floyd's ditto, now sinking	11½ „

Lewis's Shaft.—We have had to straighten timber and cut down all the depth, for the former party did not sink, or drive, one fathom that we could make available—it was either crooked or too small. I hear it was not the fault of the captain, but the directors would work it in their way; from this shaft we are now driving south, on the course of the lode. Some good stones of ore, and rather improving; and, in the course of a few days, expect to hole to an end driving north, on the course of the lode, from Cocking's shaft, where the lode is better—holding rich copper ores (the red oxide), and worth, I think, 12*l.* per fathom—costing 50s. for driving. These backs, from Lewis's to Cocking's shaft, will pay either by tutwork or tribute; the ores here, when dressed, may be worth 23*l.* per ton, but the ores in general are very light, and will bear dressing by water.

Cocking's Shaft.—We have, to the west of the last-named lode about 2½ fms.; cut a branch, about 1½ inch wide, holding good copper, and worth 30 per cent.; this branch is bent, and, I think, it falls in again both north and south. We have seen its junction in the north, at the 12 fm. level—there the lode was larger than usual, with rich ores. As soon as Lewis's and Cocking's shafts are communicated, we shall drive south on the lode, and make more tribute ground also on the branch—price for driving about 50s.

Williams's Shaft is about 100 fms. east, further east than the last named lode, and is sunk as an underlayer 12½ fms.; at the bottom we have driven a cross-cut west, and have cut two branches; the ores are principally red oxide and grey, worth 48 per cent.; in my last, I referred to this lode, as connected with slides, and having in it the blue carbonate; we now find it slidy, and I like the appearance much, although it may be rather failing; we can open ground here for about 50s. per fathom, which will do on tribute.

Floyd's Shaft is sinking to cut a lode, a fine gossan, about 5 ft. wide, with stones of ore; this lode is further east than the last named, and when the shaft is down 14 fms., I intend driving to cut the lode, and extend levels on it. We have also began a deep adit, which will cross-cut all the lodes, and in 400 fms. driving, will be 90 fms. deep; we are in from point of lobby 50 fms.; hitherto it has been washed ground, costing at present 23s. per fm.; the point of this lobby begins on a plain, which will make a fine dressing-floor, in case we cut water now, except in the winter, in our valley or gully. We have eight houses built of wood, mud, and covered with reed; they are built cheap, as the men have done most out of core, in order to save rent; we are now building four more of stone, but have great difficulty in getting masons here, and have suffered much from want of proper houses to live in, as the weather is either hot, wet, or windy. The late directors had a young man, called Donethome, from St. Just, Cornwall, as captain on the mine; they asked if we would employ him for a few months, until they could get another place for him; but, poor fellow, he caught cold, and died in about two months after we began; I shall now turn his little property into money, and send it on to Cornwall to his friends. I think there are a great many more lodes in the sett than have been seen, and we are now employing two men costeaning, in order to find them. The strata in which we have hitherto found copper has been primitive limestone, mixed with a delicate white mica, and a schistose; it will be an inviting mine for men to work in, as it will be dry and clean. The general wages of miners in the colony now is about 7*l.* per month. The copper ores here are so singular, and new to Cornishmen, that they have almost all to learn—consequently, I am obliged to instruct them by my assays, for I let no new substance, supposed to contain valuable metal, escape—consequently, my crucibles are almost done, for they were very poor, and I hope you will depute some one to send me out 100 dozen of the best Cornish crucibles, from Mr. John Mitchell's, Calenick, near Truro, as I shall have many samples to assay, when we are opening the ground for copper. We have now 18 miners (most of them with families) opening ground for copper, and, I hope, in two months we shall have several tons at surface. There is now an attempt by the Government to impose a royalty of 1-15th, but it is strongly opposed by all the colonists, and I hope we shall succeed in keeping it off; should it be put on, we are subject to it—however, it may not fall so heavy on us, because we shall have little or no water charges nearer the port, and a better road than many of the mines. Should it be levied, we hope to arrange with the officers at so much per ton, for what we export. Then we must see to it, that we make the ores very clean, and save expense in carriage, freight, and royalty. Mr. Angus, or Mr. Smith, will soon send you on a copy of the accounts for the first four months in this year.

I send you a description of the work done in these months, and the cost:—

Costs: January, 1847	£133	9	4
February	96	15	5
March	170	13	5
April	219	15	9—£620 13 11

Costeaning (93 fms.), 21*l.* 4s. 2d.; drove (65 fms.), 106*l.* 8s. 2d.; sunk (33 fms.), 66*l.* 9s. 2d.; repairing shafts and levels, 59*l.* 2s.; cutting and sawing timber, 13*l.* 2s.; masons, and men assisting about houses, 60*l.*; travelling expenses, 20*l.*; J. H. Angus's bill for materials and carriage, 54*l.*; men holing tackle, 10*l.*; carriage of timber, &c., 20*l.*; smith's and carpenter's wages, 80*l.*; materials, 53*l.* 3s. 6d.; making charcoal, 20*l.*; sundries, 37*l.* 4s. 11d.=620*l.* 13s. 11d.

We are short of timber in our mine, and the carriage from other places is heavy; for, although the country generally abounds with wood, yet it is very poor for mining purposes, being chiefly gum and the oak, with a few pines, but they are not strong; consequently, we are obliged to use foreign timber for many purposes. The rain is now setting in for the winter, and the roads are so wet, that nearly all carriage is suspended until the summer months. They have a fine course of yellow copper ore in the company's mine.

Aug. 19.—I beg to hand you a report of our progress for the months of May and June, also our expenditure, and a description of the work done. No doubt, before this comes to hand, you will have received my report, written on the 2d of June last, in which I named the several shafts at which we were working—viz., Lewis's shaft, Cocking's ditto, Williams's ditto, and Floyd's ditto. We had, at that time, made good Lewis's shaft to the 19 fm. level; since which, we have driven on the course of the lode, in that level, about 18 fms. north, in a very promising lode, from 4 to 6 ft. wide, with good ores, but not rich enough to take away. Also began to sink, to get down about 10 fms. deeper, where the lode gives its regular character (as, in the summer, I saw it with regular yellow copper ores); but we were obliged to leave it, as the unusual rains have risen the water 7 fms., and we shall not be able to do any thing more in this level until Nov. next, when we intend sinking the shaft to the 30, and extend on the lode north and south. Cocking's shaft has been opened to Lewis's shaft, in the 12 fm. level, by driving on the course of the lode, which holds very good red oxide of copper, but not so grey as when I last wrote. We are now stoping the back, from which we raise excellent ores, but it is not abundant. At the south of Cocking's shaft, the level is driven on the course of the lode for about 14 fms., from which we are getting a small portion of very rich copper. The small west branch of copper (to which I referred in my last) was driven on for 4 fms., but, being poor, it was abandoned, as the ground became hard. At Williams's shaft we have opened about 20 fms. of ground, but cannot cut a lode of any regularity. Most rich ores are here, but no established lode can, as yet, be seen; and having sunk on the blue carbonate from surface (which gave all that ever saw it a high opinion of its value), we find it is quite unbottomed, and is a small deposit of ores; but I am of opinion, that a great deal of copper may be found here, as well in many other parts of the sett, by getting below the level of the water. At Floyd's shaft we are still continuing our cross-cut east, and have gone through two small branches. We have about 7 tons of ore, but not yet dressed, but intend doing so as soon as possible. I thought best to discontinue our deep adit (as the ground is hard), until we find a good lode in the hill—we are in this adit about 70 fms. Our men have done excellent labour, as you will perceive. In two months the men costeaned 35 fms. 3 ft.; sunk, 11 fms. 9 in.: drove, 122 fms. 3 in.—Cost for May and June, 1847, 619*l.* 8s. 10d. Please let me know, if you purchased the mine materials that was on the mine before I came out. Miners' wages are rather lowering—poor fellows! scores of them know not where to wander for work.

Sept. 9.—Since I wrote you on the 9th ult., the heavy rains have ceased; and, in order to prove the lode under the 20 fm. level, I put great force to sink the winze we were obliged to abandon. We are now down 11 fms. under the 20 fm. level, and for the last 5 fms., have had fine stones of yellow copper ores, worth 30 per cent. The lode is from 3 to 6 feet wide, but not quite regular in its underlay, holding rich spots of ores, 10 to 15 lbs. weight. At the point where the water is stationary (or under which it never sinks), the yellow ore is found; and the ground, as well as the character of the lode, is changed, and looks very promising. Instead of the carbonate and oxides, we have now regular yellow copper ores, as rich and as promising as I ever saw in Cornwall; but we have not enough of it yet. The winze alluded to above, in which we have the copper, is 11 fms. north of Lewis's shaft, and is now down to the same level, and intend driving north to hole to winze, which will be more convenient for air, and drawing the stuff.—RICHARD RODDA.

IMPERIAL BRAZILIAN MINES.—*Gongo Soco, Dec.* 3.—At Bananal the adit is open as far up as Walker's (new) wheel pit, and in all the other parts it is proceeding rapidly through favourable ground. In squaring down the bottom of Thomas's shaft, we have found the "shoot" of gold to be longer than we had seen it above; and, in following it, we have taken out two boxes of work for the washing-house, which will give about 4½ lbs. of gold. We shall follow this as deep as possible, and shall try to add another pump to our lift, so as to sink a few feet further on the productive vein. We have commenced extending both towards Walker's shaft, and also in an opposite direction, from near the bottom of Thomas's shaft, and we hope to intersect veins worthy of notice during our progress. In the former of these new levels we have cut a considerable stream of water. The saw-mill, and all our other surface works, are going on well, although the rains impede us a little. I have pressed the agents on the subject of forwarding the new pumps as quickly as possible, after their arrival in Rio.*

Gold Report.

1847.	From Gongo.	From Bananal.	Total Raised.
Nov. 23 to Dec. 2	lb 3 9 17 0	——	lb 3 9 17 0
Dec. 3, as p. disp. of this date	——	lb 4 6 0 0	lb 8 3 17 0
Total from Gongo, from 1st July to 2d Dec., 1847			lb 80 9 11 0
Total from Bananal, from ditto to 3d ditto			55 4 18 0
Making a total of			lb 136 2 9 0

* These pumps were shipped from Liverpool the end of November last.

NATIONAL BRAZILIAN MINES.—*Cocaes, Nov.* 23.—The people are employed at present on the highest part of the backs, and are still rising, in order to ascertain if the veins (which were, doubtless, very rich westerly) were heaved up, and towards the south wall of the lode; the whole formation is heaved considerably towards the south, at this place, by means of a cross-course, which has been previously mentioned—consequently, the veins may be also thrown that way, and continue their former direction, nearer the head wall of the lode than where we are now working. In clearing the Bandura level east, through crushed jacotinga, there has been a layer of entire ground met with, which, on being sampled, produced favourably. This entire ground is on the same line as that on which the people are working further east, near the Cavaco shaft, and we hope it will turn out something good; but, as there has not yet been any of it put to the stamps, we cannot say any thing as to its productiveness, further than that the samples are promising.

Produce for eight days	5 mks. 2 ozs. 3 ofts. 19 grs.

Cuiaba, Nov. 26.—It is true, our produce for the last month has been rather low; but we entertain great hopes of a gradual improvement in it henceforth, and beg to state, the position of the mine is much improved, and the prospects no less encouraging. A small increase in the force, both at the mines and the spalling-floors, would greatly augment the supply of ores to the stamping-mills, which would, of course, have the same effect on the produce.—

Produce from Cuiaba	Mks.	3	0	1 4
Ditto from Cocaes		5	2	3 19
Total	Mks.	8	2	4 23

Cocaes, Dec. 2.—The most promising place we have now in progress is at the south side of the sink; the lode at this place appears to open as we advance southerly; and the samples taken from there being good, is a favourable indication. Should the vein on which the large working was made, west of the Cavaco shaft, continue downwards in the direction mentioned in last report, we have yet 9 more feet to drive to reach that line—if so, it is a most favourable thing for us; and, judging from present circumstances, it is not at all unlikely to be the case.

Produce for nine days	6 mks. 2 ozs. 0 ofts. 54 grs.

ST. JOHN DEL REY MINES.—Continuation of dispatch, dated Morro Velho, Nov. 27.

To July 27—extracted	10,590 oits.	from	494·85	cubic feet of sand.		
Aug. 27—	„	10,370	„	„	534·93	„ „
Sept. 27—	„	10,429	„	„	441·34	„ „
Oct. 27—	„	11,385	„	„	508·21	„ „
Nov. 27—	„	9,386	„	„	465·38	„ „

For this startling falling off, I can get no reason from the reduction officer, but a vague assertion, that there has been an unusual quantity of inferior stone from the mine; but this, I know from Capt. Treloar, is not the fact—there was quite as much, if not more, in the preceding month (October).

Requisition for Mechanics.—I have to request the board will send out, as soon as possible, two carpenters and three smiths—they should be first-class workmen—in a perfect state of health—of good moral character—and if married men, who will take their wives out with them, so much the better. On the other hand, I regret to say, that we are on the point of losing one of our best smiths, Joseph Knight, who will go home invalided by the next gold troop; and Mr. Birt fears that a similar step must very soon be adopted with S. Paul, a carpenter, whose health has been for some time in a declining state. I have long hesitated to call on the board for this increase to our mechanics' force—hoping that the new pump and new pitwork being once completed, we might have sufficient hands to get through our other new works, together with the immense weight of repairs and running work, which, in this great and increasing concern, we must constantly look for; but one new work compels us to undertake another—the erection of new stamps compels us to remodel and enlarge the amalgamation-house, so as to render it capable of doing the additional work preparing for it. The old, and nearly worn out, 14-feet wheel, now in use there, must be replaced by a new 30-feet wheel. The four amalgamation barrels must be increased to eight, together with the needful wheels, boxes, launders, &c. A new furnace must be erected for burning off the gold; and all this must go on (*pari-passu*) with the new stamps, so that the whole may be ready to work on the same day. A further addition will then become requisite to the spalling-floor, and Capt. Treloar threatens me, that, in another year, we shall require a third hauling machine. Another work, of much less importance in itself, but of great utility, ought to be set about as soon as two or three carpenters can be spared for the purpose—namely, to rail in, and place under protection of lock and key, the portion of the streaks of all the stamps which contains the head skins: these head skins holding the richest and most valuable portion of the sand, are now, and always have been, completely exposed; and, considering the great temptation they offer, I am only surprised that robbery has not gone on to a much greater extent than has heretofore been supposed. I am convinced the board will agree with me, that it would be a false economy to clog the onward course of Morro Velho in the brilliant and profitable career on which she has now at length entered, by withholding the means of hastening the completion of works, which will so soon repay their cost—besides, the European establishment has been already reduced, since my arrival at Morro Velho, by 3 officers and 9 men; add 3 ditto, who must shortly leave—viz., Martin, J. Knight, and Paul: total reduction, 15—against which we have called for 2 officers, 6 timbermen, and now 5 mechanics: total, 13—a reduction of two on the whole.

DIED,—At Redruth, Mr. Thomas Carkeet, aged 50 years. He was one of the miners, who in 1825 distinguished themselves in saving upwards of 650 souls from perishing on board the *Kent*, East Indiaman.

CHIANTLA MINING COMPANY.

A special meeting of shareholders in this undertaking was held at the offices, Duke-street, Adelphi, on Thursday last, the 10th inst.

JOHN TAYLOR, Esq., in the chair.

Mr. PHILLIPS (the secretary) having read the notice convening the meeting,

The CHAIRMAN said, the directors had prepared an abstract of Mr. Floresi's very long and elaborate report, which had been sent to each shareholder, previous to the meeting. He said, the persons who were first sent out for the exploration of the districts under notice (the best they could get at the time), had not turned out so competent as could have been wished; and an opportunity having occurred of obtaining the services of Mr. Floresi, they had done so, and the report was now before them. The following is the—

DIRECTORS' REPORT.

The prospectus issued in the early part of 1846, stated the object of the company to be that of exploring the mineral ground near the town Chiantla, in Central America; and it also explained the course of proceeding intended to be adopted, before coming to any ultimate decision as to working or abandonment. The shares, to the number of 3750, having been allotted, the directors, in pursuance of the plan which they had determined upon, engaged the services of two mine agents, and an assayer, and entered into an arrangement with Mr. Anderson, the projector of the company, by which his assistance and co-operation were secured. The party left London in April, 1846, arrived at their destination in the following month, and occupied themselves during the remainder of the year in the examination of the Chiantla and Alotepeque Mines, in conformity with the instructions of the directors. The directors have to inform the shareholders, that the reports received were unfavourable as regards the mines of Chiantla. They confirm the fact, that numerous mineral veins exist, many of which present indications of a promising nature; some of these have been partially worked, but there does not appear to be anything sufficiently favourable to warrant the recommendation of forming an establishment in a district which presents many natural disadvantages; such as its distance from the coast, bad roads, and the want of water-power. Before, however, coming to a final decision, the directors felt that it would be desirable to have a further opinion from some impartial person; and they were, therefore, happy to avail themselves of the services of Mr. Floresi, who, having been engaged for many years in the mines of Mexico, and being about to proceed again to that country, consented to visit Guatemala on his way. The opinion of such an authority being likewise desired by Mr. Anderson, the directors entered into an arrangement with Mr. Floresi, under which he proceeded to Guatemala, and met Mr. Anderson at Alotepeque, in the month of April, 1847; but, finding on his arrival, that the opinion of Mr. Anderson and others respecting the Chiantla district had undergone some change, and receiving from Mr. Matthews (the mine agent who remained) an opinion decidedly unfavourable to an outlay of capital at Chiantla, Mr. Floresi conceived it to be unnecessary to put the company to the expense of a journey thither, and accordingly resolved to devote his time to an inspection of the Alotepeque Mines. Under these circumstances, the directors have considered that there was no course left to them but at once to put a stop to any outlay connected with the mines of Chiantla, and they have accordingly given instructions to that effect.

The objections to an investment of capital at Chiantla do not, however, apply to the district of Alotepeque; it being much nearer to the coast, and in a more accessible country. It moreover, among other advantages, presents facilities for the application of water-power; while the mines which have been opened, and the veins generally, are represented by the agents as exhibiting highly encouraging indications, and these opinions have been confirmed by the report since received from Mr. Floresi, an outline of which the directors now proceed to lay before the shareholders.

The mining district of Alotepeque (or Alotepec) is situated in about 14° 40′ of north latitude, and 88° 58′ of west longitude, being a portion of the department of Chiquimula, in the Republic of Guatemala.

The mountain of Alotepeque forms part of the great chain which runs towards Honduras, in which the best silver veins of Central America are found. As a mining district it appears to have been known more than 100 years ago, and another period of wealth occurred about 50 years ago. The metallic veins are found in porphyritic rocks, and pass occasionally into sandstones and limestones, which appear to have been uplifted by the porphyry. The general direction of the veins is from east to west in the sandstone and limestone formation, and south-east and north-west in the porphyry, and varying very much in their inclination. The mineral wealth of the district consists principally in silver, lead, and copper. The silver is found both in the lead and copper; also as a sulphuret of silver, as ductile sulphuret, and in the state of muriate. Lead is found both as sulphuret and carbonate; copper in pyrites, in green and blue carbonate, and as an oxide. There is also a great abundance of iron ore, oxide of iron, in different parts of the mountain. The rocks supply abundance of lime for mortar, building stone of various kinds, clay for bricks and tiles, and an inferior kind of sand in the ravines. The fire-stone in the neighbourhood is not good, but may be obtained, it is said, from Tutiapa, and fire-clay at Esquipulas, and near the city of Guatemala. The number of veins and mineral deposits in the mountains of Alotepeque, cannot be less than 38 or 40, which Mr. Floresi divides into five groups, or divisions—viz.: 1. The Mines of Don Miguel Midense.— 2. Those of Don Cruz Duarte.—3. San Jose, San Rafael, and Santa Rita.—4. Anderson's Hope and El Tajo.—5. Taylor's Hope, &c.

The first group comprises the Mines of San Pantaleon, Santa Rosalia, Socorro, and Santa Fé, which have been purchased conditionally by Messrs. Anderson, Meany, and Rivera Paz, with Mr. Midense. The mines are on the north side of the mountain, looking towards the Rio del Valle, and are surrounded by a fine forest, chiefly of pine and oak. There is a dwelling-house; and there is also pasture land enclosed, sufficient for 180 animals during the greater part of the year. There is a leat with water sufficient for stamps and washing the ores; and about 2½ miles from the mines, a piece of land, called "La Vega de San José," presenting great facilities for the construction of smelting-works, and having the advantage of extensive water rights. The mines have been worked at different times, but unskilfully. The vein of San Pantaleon was the one which yielded the best produce, and even now may be considered as the most promising in the district; its workings are extensive, and in a tolerably good state of preservation. In the upper works there are still ores to be raised, which, although hard to grind, will pay costs. In the bottom of the mine discoveries have been made lately of the most promising character. Some assays of the latter exceed 700 ozs., and others 450 ozs. of silver per ton of ore. The veins of Santa Rosalia, Socorro, and Santa Fé, have been worked at different times, and have produced moderate quantities of ore of good ley. They are well situated for deep cross-cuts, and can be worked and drained without the necessity of a single shaft, requiring only such winzes from the surface as may occasionally be wanted for ventilation. By making proper communications, Mr. Floresi thinks it would not be difficult to raise from these mines, including San Pantaleon, from 200 to 250 cargas of ore per week, of an average ley of 16 ozs. of silver per carga, or about 130 ozs. per ton.

The second group consists of the mines purchased, during Mr. Floresi's stay by Mr. Anderson, of Don Cruz Duarte. Mr. Floresi considers these, next to Mr. Midense's Mines, the most important and most desirable to be tried. To this group belong San Carlos, Rosario, San Miguel, San José de Atutilca, and others. The veins, although in general not very wide, are promising; the ores are rather mixed, and consist principally of a compound of copper, lead, and silver, better adapted for smelting than amalgamation. The mines of this group are also well situated for adits, and not more than one league from the Vega de San José, where it is proposed to erect the smelting works—150 or 200 cargas could easily be obtained from very few "labores," if the veins continue in depth as they are seen at surface.

In the third group are the mines of San José, San Rafael, Santa Rita, and Santa Domingo. San Rafael and San José appear to have been worked extensively; but, as they do not present such facilities for deeper levels as the other mines, Mr. Floresi thinks it would not be prudent to spend money at present upon them.

The fourth group comprises the mines of Santa Catilina, or Anderson's Hope, and El Tajo. Mr. Floresi considers them to be neither regular veins, nor beds, but a re-union of several small veins. He thinks it probable, that by a judicious arrangement, an abundance of ore may be discovered, and raised at a cheap rate. The ores of El Tajo form an excellent flux in the smelting of other ores.

The fifth group consists of Taylor's Hope, and adjoining veins. Taylor's Hope is about six miles from the site of the proposed smelting works. The nature of the vein both in regard to width and regularity of the walls, as well as for the richness of the ore, warrants a trial. Mr. Floresi observes—"During my stay, the mine was drained to the bottom; and I am happy to say, that although the ores are not very abundant, still they continue down in regular strings—the width of the vein and regularity of the walls being the same as near the surface; and if the richness of the ores correspond with the assays, it would pay to open ground, and work on tribute, even at the present depth." The water, which is at present troublesome, might be drained by an adit, by which means, the expense of drainage, and drawing the stuff to the surface, would be saved.

The rivers running in the immediate neighbourhood of the mines, allow of reduction works being established, and worked entirely by water-power; the forests are capable of supplying charcoal and wood to any extent, and very few places can furnish more variety, or a greater abundance of timber, than this district.

In summing up his report, Mr. Floresi considers that, if a comparison be made with the mines of Mexico, there will be found a saving of at least 25 per cent. in the price of labour and materials; of about 50 per cent. in the transport from the coasts; of 3 per cent. in the carriage, and 8 per cent. in the circulation and export duty of specie, while the export of bullion prohibited in Mexico is permitted in Guatemala. He goes on to say —"Without offering a prospect of a bonanza, such as we are accustomed to see in the rich mines of Mexico, yet the district presents a very encouraging prospect, and such as, in my opinion, would warrant the investment of a moderate capital. There are already ores in sight, but further discoveries ought to be made before attempting to realise the produce of the mines. The trials are of a simple nature, and could be made very economically." After entering into some details with reference to outlay, Mr. Floresi estimates that an establishment may be organised, and a thorough trial of the mines effected for the sum of 27,000*l.*; but he remarks, "In the event of the mines giving favourable results, the capital required in all probability would be much greater than the sum stated above, on account of outlay required for buildings, stores, haciendas, &c. I think, therefore, that it would be imprudent to begin operations, unless with the certainty of being able to raise a capital of 50,000*l.* The produce of the mines meanwhile might be such, after spending 14,000*l.* or 16,000*l.*, as to supply funds sufficient to carry on the concern, without the necessity of making use of all the capital subscribed. That some of the mines will soon begin to produce ores enough to keep going a small hacienda, I believe to be very probable." The foregoing is but a very faint outline of Mr. Floresi's report, which is exceedingly elaborate and interesting. The masterly manner in which his report is drawn up, clearly shows that the investigation has been conducted by one thoroughly conversant with the subject; and a favourable impression is produced as to the value of the mines, by the very circumstance of Mr. Floresi having taken the trouble to report upon them with such minuteness of detail, which he would hardly have done if the prospects of the concern had not been very encouraging.

Unfortunately, however, Mr. Floresi's report reached England at the time when, owing to the depressed state of the money market, it would have been utterly useless to attempt the raising of capital for the objects contemplated by the company. Upon this view of the case, and finding also that the calls already made had not been responded to by some of the shareholders, the directors came to the conclusion, that it would be desirable to wind up the affairs of the company, and accordingly gave notice of their intention to do so. Previously, however, to a dissolution, they considered it right to liquidate the outstanding liabilities, for which purpose a further call of 4*s.* per share was made. They regret to say that of this, as well as of the previous call, a considerable sum remains still unpaid; and that, consequently, the dissolution of the company cannot be completed until the directors are enabled to satisfy the demands upon them, which amount to about 650*l.* The amount of expenditure has exceeded that contemplated as sufficient for the inspection, but the excess has been occasioned by the examination of two districts instead of one; and in this there is every reason to believe that every economy has been exercised. The object of the company, so far as the acquisition of good mines in Guatemala is concerned, has been accomplished; and but for the change of circumstances in this country, there would have been no sufficient ground for withdrawing from the undertaking, and even now it is open to the company to preserve the rights of the mines acquired, until the arrival of a more favourable time for raising capital. Mr. Anderson, who is at present in England, proposes to effect this for 12 months, at a cost of about 250*l.*; and as some of the directors are well-disposed towards the adoption of the plan, they are desirous of ascertaining the sentiments of the shareholders upon the question, in order that they may form some estimate of the amount of support they are likely to obtain in the event of the formation of a new company to work the Alotepeque Mines.

From the statement of accounts, it appeared that the total amount of calls received had been 3574*l.*, and the expenditure as follows—viz.: Salaries for services during the exploration, Mr. Anderson, 568*l.* 16*s.* 2*d.*; Capt. Hosking, 250*l.*; Capt. Rodda, 200*l.*; and Capt. Matthews, 150*l.*; passages and travelling expenses, 206*l.* 19*s.* 10*d.*; sundry goods and materials, 227*l.* 18*s.* 2*d.*; home management, 137*l.* 2*s.* 10*d.*; Mr. D. Floresi, on account of inspecting mines, 200*l.*; expenses in Guatemala (less 172*l.* 5*s.*, charged in salaries), 4716*l.* 2*s.* 6*d.*—together, 8756*l.* 19*s.* 6*d.*; leaving a balance against the company of 182*l.* 2*s.* The liabilities are the above balance; due to solicitors, 200*l.*; D. Floresi, 100*l.*; sundries, 77*l.* 15*s.* 6*d.*—total, 649*l.* 17*s.* 6*d.*; to meet which, there are arrears of calls amounting to 865*l.* 2*s.* 6*d.*

The CHAIRMAN then observed, that nothing had been paid either to directors or manager. The expenses in Guatemala, he believed, had been kept as low as possible; and the London charges were only what could not be avoided—such as rent, postages, &c.

A resolution was then passed, adopting the report, the accounts to be audited, and presented at the next meeting.

Mr. J. TAYLOR, jun., the manager, then read a short statement of the opinions and recommendations of himself and the directors: they considered the Chiantla Mines badly situated, being so far from the coast, without roads or water-power; that, whatever might be the riches there, it was advisable to give up all idea of prosecuting them. With respect to Alotepeque, the same objections did not apply; the district was healthy and fertile, with plenty of water-power, and the mines rich and promising; and only 40 leagues, by good roads, to two harbours of shipment. It was, therefore, recommended to dissolve the old company, form a new one, consisting of 3500 shares, the old shareholders to have precedence, and make a call of 2*s.* 6*d.* per share; that Mr. Anderson be empowered to proceed to Mexico, on the terms mentioned in the last clause of the report, to preserve the right of certain mines on behalf of the company, establish small smelting works, and enable him to send to England the answers to the company's offers, which might be expected in less than six months; when another meeting would be called, and the steps most conducive to the interests of the company be decided on.—A very long conversation then ensued, as to the best and most legal mode of dissolving the old company and constituting the new one, in such manner as to secure them, should the undertaking turn out profitable, from litigious parties who had declined to take shares; when, at length, a resolution to the following effect, was unanimously agreed to:—"That the Chiantla Company is hereby dissolved; and that the directors be requested to take the best means of [illegible] the arrears of calls, and compounding for them, if necessary; [illegible] they take the best steps in their power for ascertaining the exact p[illegible] body of shareholders, who are willing to join the new company f[illegible] Alotepeque Mines, and for reducing ores in that district—suc[illegible] appearing to this meeting the only apparent means of making t[illegible] formation acquired by the outlay of the capital of this company at all available."

The MANAGER said, he would take immediate steps for obtaining distinct answers in writing from every shareholder; and, after a vote of thanks having been passed to the chairman, the meeting separated.

BURRA BURRA MINES—SOUTH AUSTRALIAN MINING COMPANY.

We have received the following report presented at the last (second) annual meeting of this company, held at the Auction Mart Tavern, Adelaide.

CHARLES BECK, Esq., in the chair.

This company owns the celebrated Burra Burra Mines, the richest and most productive of any of the South Australian Mines yet worked.

REPORT.

The prospects of the mine continue favourable, and discoveries are frequently being made tending to increase its value. At Bunce's shaft, a considerable distance from the principal workings, 80 tons of the blue and green carbonate of copper was raised last month, and there is every prospect of exceeding that quantity this month. An important discovery has been made within the last few days of a lode of excellent ore in the new ground, extending throughout the mine at a depth of 21 fms. The pitches generally are producing good ore in large quantities, and the men, numbering more than 200, are working with spirit. The quantity of ore raised in March last was 1192 tons, and it is expected that a like quantity will be produced this month. The quantity raised during the last six months was 3481 tons, which is less by 273 tons than the preceding half-year; but this decrease arises from the mine being closed nearly two months of the last half-year, for the purpose of dressing up the ore raised from the old pitches, and, when compared with the actual working time of each six months, will be found to be a large increase. The directors have only received the complete account sales of about 800 tons of ore, the highest price realised being 31*l.* 9*s.* per ton, the lowest 10*l.* 16*s.* per ton, and the average about 16*l.* per ton gross, leaving a clear profit to the association of about 32*l.* In addition to this, the directors have received the Swansea sale lists, and samplings of 944 tons of ore, being the cargo of the *Malcolm*, and parts of the cargoes of the *Phœbe* and *Emu*, which will realise 19*l.* 6*s.* per ton; and, when added to the first-mentioned quantity, the average of the entire (1757 tons) will be about 17*l.* 14*s.* per ton.

The directors have, however, to remark, that the ores raised last year, being principally surface, were much inferior to those shipped this; and that better results may be confidently expected from their improved quality—in evidence of which the three last shipments, consisting of 913 tons, will produce an average of 42 per cent., worth upwards of 30*l.* per ton. The cargoes of the *Bweng* and *Appleton*, now loading together, with the bulk of the stock on hand at the port and mine, will quite equal this per centage. As soon as the ore now at the port is shipped, the directors intend declaring a dividend of at least 50 per cent. on the capital stock of the company, which they will be enabled to do from the profits of the 1757 tons of ore above referred to. The directors can now report that the smelting works are so far completed, that operations will commence in a few weeks, which they expect will be attended with success. Subjoined will be found the cash balance-sheet of the association, to the 31st March last. The item "Sundry Creditors, 7232*l.* 12*s.* 11*d.*," at the debit of the directors, has been incurred in payment of wages and cartage of the ores on hand, which, when drawn against, will leave a large balance in their favour. It will be found that the expenses of the mine have not much increased; and the average cost of all the ore raised, including every expense attending it in the province, is about 6*l.* per ton. The resident director having resigned, the directors have appointed a general superintendent to fulfil his duties. It will be necessary to elect five directors, in the place of Messrs. Stocks, Jun., Paxton, Featherstone, Bunce, and Allen, and two auditors, in the place of Messrs. Brown and Wicksteed.

We have also the accounts, which show the total quantity of ore shipped and raised since the opening of the mine on the 29th September, 1845, up to the 31st of March, 1847, is stated to be 9841 tons. Of this 818 tons were sold in the colony, 5220 tons exported to Swansea; at Port Adelaide ready for shipment, 1648 tons; on the road to the port, 308 tons; on hand at the mines, 1850 tons. The ore of which accounts of sales had reached the company, which had been sold at Swansea, averaged 17*l.* 14*s.* per ton. This was all surface ore; and the remaining shipments, amounting to 4800 tons, were all of a superior average quality to that first sent to England. Thus, the whole of the ore actually sold, or on the way to market, amounts at present to about 8500 tons, which, at the price of about 17*l.* 14*s.*, would give in round numbers something over 150,000*l.* The whole expenses of the mine, including original purchase, machinery, wages, &c., are stated at 75,228*l.*; after which, adding 42,500*l.*, the amount of freight and charges at 5*l.* per ton, would leave the company a profit on the undertaking of 32,272*l.* In other words, the Burra Burra Mines have, in 18 months' time, repaid to the purchasers every farthing of outlay, and over and above this have realised to them a profit of 32,272*l.* We doubt if the history of mining transactions can furnish a parallel to this.

As soon as the ore at the port was shipped, it was the intention of the directors, as stated in the report, to declare a dividend of 50 per cent. on the capital stock of the company, which they would be enabled to do from the profits of the sale of the 1757 tons already actually sold.

TAVY CONSOLS MINING COMPANY.

At the two-monthly meeting, held at the Central Hall, Plymouth, on the 29th January, the accounts were examined and passed—showing balance cost for Nov. and Dec. last, 362*l.* 19*s.* 1*d.*; merchants' bills, 294*l.* 13*s.* 10*d.*—657*l.* 12*s.* 11*d.*—By balance at last account, 72*l.* 16*s.* 8*d.*; November ore, 193*l.* 14*s.* 8*d.*; December ore, 299*l.* 6*s.* 10*d.*—leaving balance against the company of 92*l.* 14*s.* 9*d.*; to cover which, there is a return of January ores, not received (102 tons), estimated at 400*l.*—It was then resolved, that the reports of the committee and captain be received, adopted, and circulated, among the shareholders—that the recommendation of the committee to continue the sale of ores by private contract be adopted—that Capt. Martyn, who broke his leg, be allowed three guineas per month for three months—and that Capt. Goss's appointment as head captain be confirmed—that the thanks of the meeting be given to the committee for their services—that holders of 10 shares be eligible for committeemen, instead of 20, as before—that Admiral Tremlett, Messrs. Rundle, Foy, Fisher, Arscott, Pethick, and White, be the committee for the next two months (three to form a quorum)—that the draft sett from the Duke of Bedford be submitted to the committee for approval, and that they be authorised to call in any assistance—and that the thanks of the meeting be given to G. Strode, Esq., for his kind presentation of a bell to the mine.

The following reports of the committee and Capt. Goss were read:—

REPORT OF THE COMMITTEE.

Your committee have much pleasure in informing you, that since the last general meeting, their arrangements have been completed with his Grace the Duke of Bedford, for that extensive and valuable piece of mining ground, called "Blackmorwelham Wood," bounded on the east and north-east by the River Tavy, and on all other sides surrounded by Tavy Consols sett, and into which our present workings are immediately running. The boundary was marked off on Saturday last, by the agents of the lords; and as soon as the draft of sett is submitted, workings east on the course of our copper lode will be immediately commenced in the duke's land. We suggest that the lessees of the sett should be the same gentlemen that are the lessees of the watercourse which runs through it. For the financial statement we refer you to the purser's account, and to the captain's report for the working department. Your committee having also taken into consideration the sales of ores, strongly recommend that the sales should, for the present, be continued by private contract, as heretofore. We beg to congratulate the shareholders on the prospects of the concern, which are most flattering, and promise, at a very early date, to repay them for their outlay and perseverance.

CAPTAIN WILLIAM GOSS'S REPORT.

Tavy Consols Mine, Feb. 8.—I beg to say, since our last general meeting, the engine-shaft has been sunk about 2 fms., producing about 16 tons per fm.; the shaft is now 13 fms. below the 24 fm. level—worth at present about 70*l.* per fm.; we have suspended sinking for the present, sollared over the bottom of the shaft, leaving 6 ft. fork, and commenced driving east and west in the 36 fm. level; we have driven east about 2 fms., and west about 1 fm. 2 ft., producing about 14 tons per fm., as we carry the plat 10 ft. high, and the ends are still very good. We have cased and divided the shaft from the 24 fm. level to the 36, in order to sink again as soon as possible, which will be about a fortnight from this time. In the 24 fm. level, we have cut the cross-course, or lead lode, driven on it north 1 fm. 4 ft. 9 in., and south 1 fm. 3 ft. 9 in., which produces saving work for lead, and will pay cost for driving; we have suspended those ends for the present, in order to put the men to rise in the back of this level, to cut out tribute ground, and to ventilate the mine. The pitches in the back of the 12 fm. level are looking very favourable, and worked at 7*s.* in 1*l.*; the pitch in the bottom of the 12 fm. level is being worked at 7*s.* in 1*l.* The pitch in the bottom of the shallow adit is working at 7*s.* in 1*l.*, and I believe the tributers are all getting pretty good wages; we have also a pitch in the bottom of the shallow adit, on the lead lode, working at 14*s.* in 1*l.*, and I believe the men are getting good wages. I believe, as we go farther north, this lode will prove very productive. We sold 102 tons 7 cwts. of dry ore last month, and we shall be able to sample about 80 tons of ore this month, having been hindered by the frost and snow, and getting the shaft in order to draw from the bottom with the machine.

THE LADY ELIZABETH MINING COMPANY.

A special general meeting of shareholders was held at the offices of the company, Lombard-street, on Tuesday last, the 8th inst.

THOMAS BARTLETT, Esq., in the chair.

After the usual preliminary proceedings, the CHAIRMAN submitted the reports of Messrs. Patey and Williams, and congratulated the shareholders upon the prospects in view, and more especially upon the discovery of the plumbago lode—an article which would at once meet with a ready sale, not only in London, but elsewhere, and there was no question but what it would shortly be enhanced greatly in value, in consequence of the great decrease of the mineral in Cumberland, which at present supplies the chief part, if not the whole, of the London market. Any quantity of this article may be obtained upon the mine, and the transport to London and elsewhere is easy, the mine being distant from the shipping port only two miles. The shareholders upon this article alone may expect large and permanent dividends—at the same time, they would recollect that there were two other articles, both of superior quality—viz.: umber and ochre—the former, as far as yet discovered by boring, sinking shafts, and driving adits in different parts of the sett, amounted to about 11,500 tons upon the most moderate calculation; and this would leave a profit to the shareholders, after the payment of all expenses, of 40,497*l.* 10*s.*, taking the present price of umber at 5*l.* per ton, and the expenses of washing, cleansing, freight, &c., to London, at 30*s.* per ton. The ochre can be raised in any quantity, and of a superior quality; the lodes were two in number, and the quantity unlimited; the whole of the above minerals had been carefully examined by Dr. Ryan, of the Polytechnic Institution, and other able chemists, who pronounced them of a superior quality—indeed, the Plymouth umber has been always celebrated for its high quality, and free from impurities; it fetched a higher price in the market than any other umber. He (the chairman) need scarcely add, that the minerals of Devon were imperfectly known; but no district in Great Britain, for its size, produced minerals of more variety, and greater abundance, than this county. The reports have been read; he thought there was no doubt but what they may be relied on, both for truth and correctness—the one being by Mr. Patey, and the other from Mr. Williams, who had been sent expressly from Cornwall, to inspect and report upon this mine, and it afforded the shareholders and himself much pleasure to find the report given by Capt. Patey had been strengthened by the one received from Mr. Williams. He could only further state, that the sum of 5*l.* per 500 shares would be fully sufficient to pay the whole of the expenses incurred in purchasing the sett, and making the discoveries referred to in the reports, with the erection of all necessary machinery for grinding, drying, and manufacturing the article for market, and that no further call whatever would be required. He also begged to state, that he had personally inspected the mine, and he was bound to say, that it bore out the reports that had been given of it, and he had no question of doubt upon his mind that the shareholders would get amply remunerated for their outlay, and they would find that this was no speculation, as the greater part of the mineral was to be seen. He would strongly recommend the shareholders to make a personal inspection of this valuable property; the journey was one of a few hours, and easily accomplished, as the South Devon Railway, on being completed, would be only three miles distant from the mine.

REPORT OF CAPT. R. B. PATEY.

This mine is situated in the parish of Ermington, 9 miles from Plymouth, and 2 miles from Mothecombe Harbour, where the produce can be conveyed, for shipment, at a small expense. On the sett is a large lode of umber, running east and west, which has been opened, and many tons sold, averaging from 5*l.* to 8*l.* per ton. The open cutting has been made, 50 ft. long, 30 ft. wide, and 20 ft. deep, from which *two men can raise and wash from 15 to 20 tons per month.* I have opened the lode, at different places, nearly 100 fms. About 12 fathoms from the umber there is a good ochre lode, about 12 feet wide, of a very good colour; and another lode of ochre (fit for paper-makers), of which the proprietor has sold many tons. An adit level has been driven 16 fathoms, and a shaft sunk 7 fms. —three sets of boodles, or washing-boxes, complete, with floors, and 20 tons of umber washed. It will be requisite to have a crushing-mill (we have a good stream of water running through the sett), with drying sheds, &c.; about 130*l.* would put the mine into full work, and, I believe, no further calls would be required—except the works should be worked on a large scale. The lease is for 21 years, from Sept., 1847, at dues, or a royalty, of 1*s.* per ton for iron; 5*s.* per ton for umber and ochre; and 1-15th for all other metals and minerals. This, I consider, is no speculation, as we shall have ready for market, in six weeks, 50 tons of umber, and as many of ochre. The raising, washing, packing, cask, and freight to London, will not exceed 30*s.* per ton.

REPORT OF MR. C. WILLIAMS, MINING ENGINEER.

According to your request, I visited this mine on Thursday last; it is situate in the parish of Ermington, in the county of Devon (held on lease for 21 years), on a gently rising hill, on an inclination of about 2°; so that a level, or adit, may be driven under at a small distance, to take off the water from the mine, which appears to be no more than what is called top-water. The mine appears open: the adit, or level, in my opinion, should be sufficiently wide to admit of a tramroad being laid down, for the purpose of taking out the umber—where ought to be fixed a water-wheel (there being a good stream of water), to crush the ore, prior to its being washed and made marketable; there should also be a shed erected to dry the ore, after being washed; the cost of this, together with a 12-feet wheel, would be about 30*l.* Several tons have been returned, and realised from 5*l.* to 8*l.* per ton. The lode is running east and west, and has been traced 1200 ft.; it is 40 feet wide, and 18 feet deep; so that, if it would weigh 30 lbs. to the square foot, which I consider may fairly be calculated upon, it would produce 11,500 tons: this, at 5*l.* per ton, would be 57,855*l.*; then, deduct for dues, 5*s.* per ton—raising, washing, and getting it to market, altogether, 30*s.* per ton; this would be 17,357*l.* 10*s.*—leaving a balance of 40,497*l.* 10*s.* upon the whole, so far as has been discovered. The surface, or overburthen, upon this lode is only from 3 to 4 feet deep, which is quite solid, and without waste. Any quantity of ochre, and of excellent quality, may be obtained on this sett, and within 10 or 12 fathoms of the umber lode. Any further remark I could possibly make upon this mine would be superfluous, after making the most minute calculations, as above.—*St. Teath, Cornwall, Jan. 22.*

SMELTERS VERSUS MINERS.

SIR,—I have, for the last few years, read so much upon the iniquities of the smelters and the oppression of the miners, that I am almost sick of the subject. Every one seems to talk and to write, but no one either acts, or proposes a feasible mode of action. Your very flowery and poetical correspondent, in last week's City article, mourns in pathetic strains, over the unfortunate miner —thunders at the smelters—"talks as familiarly of roaring lions, as maids of thirteen do of puppy dogs"—and, satisfied with his flourishes, leaves the remedy for others to apply. As Ovid says, however, "*Nulla venenato littera mista joco est.*" Between you, and me, and the post, Mr. Editor, though the smelters, doubtless, are ——, the greatest blame attaches to the supineness of the complainants, who either idly look on, or content themselves with an occasional growl. Let us look at a few facts. Smelting, to our cost, is a great monopoly; we have been told so often enough, and we know it. The smelters consist of a few individual firms, who, uniting with the tact and cleverness of business the mode of (what has been beautifully termed) "working the oracle," have raised to themselves colossal fortunes, and are, in consequence, masters not only of the metal markets, but of the miners. Many members of these firms were formerly "miners"—they have, as it were, risen from the ranks, and find their present business more lucrative than underground operations; and, if such men as these see gentlemen of high station, and others of high standing in the commercial world, (who are, in a general way, scrupulously exact in all their dealings, and view, with the greatest jealousy, any attempt to impose upon them in transactions connected with their own business), allowing them to continue a shameful, but, to them, an enriching, monopoly—are they (that is, the smelters) to blame? Of course not—their sole business is to make money, and, like Sir Pertinax, they do it. The "oracle" is said to be worked thus—the smelters meet every month in London, and fix the price of copper (the metal), and then send off to their agents, at Swansea and in Cornwall, to guide them in the prices they are to bid for the ores at the ticketings. This is regulated so as to give them a clear profit of about 30 per cent. The smelter is not content with the tradesman-like returns, of buying an article in the rough, and manufacturing it, so as to get a fair profit upon the transaction: he assays the sample of ore he intends to bid for, finds out how many tons of the ore it will take to yield a ton of pure metal, and knowing what he can get for the latter, and the cost he will incur in making it into metal, he bids a price for the ore according to its produce. This would appear fair enough; but he goes on to say—"Now, Mr. Miner, your ore yields 10 per cent.; 10 tons of it, therefore, will give me 1 ton of metal. This ton of metal is worth 100*l.*—so that, if I give you 8*l.* per ton, I shall get 20 per cent. profit; but, then, Mr. Miner, it will cost me something to make it into copper, and *I must charge you* 2*l.* 15*s.* per ton—so that I will give you 5*l.* 5*s.* *per ton for your ore*, and if you do not like the price, take it home again. And, by the way, Mr. Miner, in carting and shipping the ores, there may be a waste, and I must have 21 cwts. to the ton—so that, in 100 tons, I shall get 5 tons into the bargain; and so good morning, Mr. Miner." The miner, poor devil, what can he do? He knows the expense of smelting is not half the amount per ton charged him, and he also knows the waste per ton is not, perhaps, 1 cwt., whilst, according to the custom of Cornwall, he has to allow these cormorants 1 cwt., or 5 per cent. In every way the smelter takes an advantage, until the miner can scarcely get a remunerative price for his produce, nor the workman for his labour. The injurious effects of this are already showing themselves in the deep mines; and where it will end, unless something be done, I can only conjecture.

Looking at this, what, I would ask you, Sir, is to prevent the formation of a public smelting company? To make a railway of questionable importance—to get up a company for providing means for a visit to the moon—a million is soon raised. Here is a tangible thing that would pay 30 per cent, and millions of capital unemployed! I believe there are now several gentlemen of high standing ready to subscribe their thousands each to forward the object, but it wants a *mover*—in fact, it wants a *head*. The profits of smelting are known to be enormous. I have heard, but cannot vouch for its truth, that the profits of a single year have *been counted in millions*, and this does not appear so incredible, when we look at the enormous fortunes realised in a few years by the monopolists of the trade; I would, therefore, suggest that a public smelting company be formed, with a capital of one or two millions, to be raised by shares, and that every mine in Cornwall, Devon, and in other parts in-

X.

terested in the question, should subscribe for a certain number of shares, according to the extent of its returns; the other shares would soon be taken up by the mine adventurers and the public. Upon these shares large interest would be paid, and the mine-owner would be doubly advantaged, by getting a fair price for his produce, and good interest for the money advanced to bring it about. The directors of Devon Great Consols, indignant at the low price offered for their ores, and the sacrifice of hundreds of pounds they have to bear monthly upon their sales, complained last week to the smelters; the latter met them, but, as I am told, offered no redress. These directors and shareholders are men to whom 10,000*l.*, or even 20,000*l.*, would be no object. If they are not also of the complaining and non-acting sort, let them show the spirit to come forward, and head the movement, and we shall soon have the company established. A way of punishing the monopolists would be, by every mining company coming to a resolution, to return just sufficient ore (and no more) to pay working cost. The furnaces of these gentlemen would then be rather bare, and better prices might ensue.—ARGUS: *Feb.* 9.

TO THE SHAREHOLDERS IN THE LATE CARADON CONSOLS.

FELLOW SUFFERERS,—Can any of you inform me, when we are to receive a dividend of the assets of this unfortunate adventure? A long time has now elapsed since the materials were sold, and we were led to expect that the proceeds would yield us nearly 5*l.* per share, but I much fear we shall realise considerably less. It appears as if the originators of this *splendid speculation* were not satisfied with having induced us to *fork out enormous premiums* for the shares, but it seems as if they were inclined to increase the loss we have sustained, by delaying the payment of the dividend. Should they continue to withhold it much longer, I desire to know, whether we cannot by law compel the purser to make a speedy settlement?—and whether you would unite, for that purpose, with—SEXTUS.

MINING NOTABILIA.

[EXTRACTS FROM OUR CORRESPONDENCE.]

CARADON UNITED.—In sinking a small shaft, to hole to the top of the run, we have cut a tin lode. Little has been seen of it, on account of the water, though large stones have been taken from it, and it is supposed to be a large lode.

DEVON GREAT CONSOLS.—At Hitchin's shaft, in Wheal Josiah, the lode has improved considerably during the past few days, and is now worth 80*l.* per fm. At Termentor, they have a fine promising lode, on which they are driving both east and west. At Anna Maria, the shaft is down to the 50 fm. level, where something good is fully expected.

EXMOOR WHEAL ELIZA.—A discovery has been made here in the end driving west. Ore is now seen at both the east and west ends, and, from appearances, a regular course of ore is daily expected.

HERODSFOOT is represented as having much improved—having a splendid course of ore in the 62 fm. level north, where they have also backs of 24 fms.

MARKE VALLEY continues to improve—the discovery was first made about six months since in the 65 fm. level. The ore is low price, but they have opened several fathoms in length on a lode that will yield 20 tons of copper ore per fathom.

PHŒNIX.—The lode continues very good, producing some rich copper ore.

SOUTH WHEAL BETSY (near Tavistock).—This mine is looking admirably, and, I have no doubt, that they will have a splendid lode there shortly. The lode is now producing some excellent stones of lead, from 15 to 20 lbs. solid. They have set two pitches, and as soon as they can clear the levels will set others.

SOUTH WHEAL BASSET is reported to have improved considerably during the past week.

WEST WHEAL JEWEL.—We have received the usual weekly report, which is, however, incomplete—the number of fathoms stoped in each level being left blank, which renders that part of the information (if such it can be called) nugatory. It shall appear in our next Number.

WHEAL WILLIAMS is looking remarkably well; the shallow shaft is 8 fms. deep, and the lode produces three tons of very good copper ore to the fathom. Preparations are making for the first sampling, and a fair pile of ore is collecting.

WHEAL FRANCO.—A general meeting was held on Wednesday last in Plymouth, at which W. BURNELL, Esq., presided. The accounts of the mine were brought forward, by which it appeared that, after the payment of all debts and liabilities, there remains in the hands of the company upwards of 400*l.* The report of Capts. Edwards and Lean was read, by which it appeared there was a general improvement in the mine, and that the lode in the 47 fm. level had just been cut—that it produced good stones of ore, and was, on the whole, most promising, the 32 fathom level above this point having been rather poor. The meeting was adjourned until the 8th of March, in consequence of the present interesting state of the mine, and with a view of publishing a full financial statement, together with detailed accounts of the state and prospects of the undertaking.

PLYMOUTH WHEAL YEOLAND.—A large party of the adventurers in this mine went out to the works, on Thursday last, to see the new engine set to work. About four o'clock, the engine was set in motion, and the adventurers had the pleasure of seeing it at work for the first time. Out of esteem for Capt. Edwards, the engine was christened "The Jane"—that being the name of Capt. Edwards's wife. The party, in performing this ceremony, drank success to the adventure. Although the engine was got to work by dint of great exertion, both night and day, she will not be fit for regular duty for a short time to come. After the adventurers had seen the works on the mine, they returned to the Lopes' Arms, at Jump, and there, with a number of the neighbouring mine agents, sat down to an excellent dinner, which the keen air of Roborough Down made them heartily enjoy. About 50 sat down under the presidency of Mr. Codd, of Plymouth—Capt. Carpenter, of Wheal Anderton, acting as vice-president. After the usual loyal and mining toasts had been drunk, the company, who spent a pleasant day, returned home.—A later report states that "the engine is working well, and that 12 heads of stamps will be in full operation Monday next." The lode in the level's east and west of the engine-shaft are rich, as is also the new south lode upon which the shaft is sinking.

PLYMOUTH WHEAL YEOLAND EAST.—We hear that it is intended to commence operations vigorously in the course of a short time.—*Plymouth Journal.*

BUDNICK CONSOLS.—At a meeting of adventurers, held on the mine, on Monday last, the accounts for Nov. and Dec., as follows, were presented and allowed, and the balance ordered to be divided, and forthwith collected:—To balance at last account, 424*l.* 12s. 10d.; costs, &c., for November and December, 1316*l.* 1s. 8d. = 1740*l.* 14s. 6d.—By ores sold (less dues), 1078*l.* 14s. 7d.; carriage of tin, 16*l.* 1s. 3d. = 1094*l.* 15s. 10d.: balance due from adventurers, 645*l.* 18s. 8d.

GRAMBLER AND ST. AUBYN.—A meeting of adventurers took place at the account-house, on Tuesday last, at which the accounts for four months, ending 31st Dec. last, were passed, and the balance against the mine of 834*l.* 1s. 7d., ordered to be divided and collected forthwith:—To balance from last account, 557*l.* 6s. 7d.; costs and merchants' bills, 1855*l.* 16s. 6d. = 2413*l.* 3s. 1d.—By ores sold (less dues), 1547*l.* 11s.; sale of materials, 31*l.* 10s. 6d. = 1579*l.* 1s. 6d.: balance, 834*l.* 1s. 7d.

WHEAL BASSET.—To labour cost for Nov. and Dec., 1083*l.* 10s. 7d.; merchants' bills for ditto, 544*l.* 19s. 3d.=1628*l.* 9s. 10d.—By copper and tin ores, sold Nov. and Dec., 1859*l.* 2s. 7d.; deduct 1-20th for lord's dues, 92*l.* 19s. 1d. =1766*l.* 3s. 6d.—leaving profit of 137*l.* 13s. 8d. Balance in favour of purser at last account, 649*l.* 1s. 8d.—leaving balance against the mine, 511*l.* 8s.

WHEAL SETON.—The usual two-monthly meeting of adventurers took place at the mine on Tuesday last, when the following accounts for November and December were allowed, and a dividend of 20*l.* per share declared:—By balance at last account, 2400*l.* 4s. 9d.; short credited on ores sold, 1*l.* 12s. 5d.; ores sold (less dues), 4166*l.* 8s. 10d.=6568*l.* 6s.—To costs and merchants' bills, 2997*l.* 18s. 4d.; dividend of 20*l.* per share, 1980*l.*=4977*l.* 13s. 4d.: leaving balance in favour of the mine of 1590*l.* 12s. 8d.

OLD TREWETHER ANTIMONY MINE, AND WHEAL THOMAS COPPER AND LEAD MINES.—These mines are situated at Port Isaac, Endillion, four miles from Padstow, in Cornwall, and extend about 700 fathoms from north to south, and 340 fathoms from east to west, the great antimony lode running throughout the length. The Wheal Thomas copper lode runs east and west, and a caunter lead lode intersects all the others—four of which have already been worked upon, and two others partially opened. The principal of these is the antimony lode, which, it is stated, has yielded 72,000*l.* worth of antimony ore, leaving a profit of 50,000*l.*; it has been worked at several different periods, but only to 20 fms. from surface; and from an accumulation of water, through want of efficient machinery, and disputes with the owners of adjoining lands, who required an exorbitant price to pass through their land, it was eventually abandoned. A lease has now been obtained from Earl Fortescue and Viscount Ebrington, for 21 years, from 1846, at 1-12th and 1-14th dues, and of the adjoining land through which the lodes pass, at 1-14th and 1-16th dues. The deep adit is now extended to 143 fms.; the deep shafts have been secured, and preparations made for fixing the pumps, to be worked by a water-wheel, 16 ft. diameter, and 4 ft. breast, which, with all necessary machinery, is ready for fixing. The lodes in Wheal Thomas are of a promising character, and all the ores raised can be shipped either at Port Isaac or Port Gaveen, the shipping place of the Old Delabole Slate Quarries, and a stream of water running into the port may be made available for working any machinery the mines may require. It is proposed to divide the mine into 1536 shares, of 2*l.* each; 1*l.* per share to be paid to the present lessees, they engaging to pay all demands up to 31st Jan., 1848, which, with 10s. per share for working the mines, is to be paid into the bankers on the day appointed, in answer to the application for shares, the remaining 10s. to be paid on the 31st May next. It is confidently expected that no further call will be required, and the company is to be conducted on the Cost-book System.

THE MEXICAN MINES.—By the New York line of packet ship, arrived at Liverpool, we have intelligence from the United States up to the 17th ult., and the orders published by Gen. Scott, at the head quarters of the army, dated Mexico, December 15th, relative to the taxes and import and export duties, among which is the following.—"The import and export duties at the ports of the republic, will remain as fixed by the Government of the United States, except that the exportation of gold and silver in bars, or ingots (*plata yoro en pasta*), is prohibited, until the further instructions of the Government on the subject are received. The direct taxes, or dues, on the production of gold and silver, and the melting and assaying dues, will remain the same as heretofore for the present." How far the above order may effect the English mining companies in Mexico, is yet to be seen. One thing certain is, that the occupation of that country by the troops of the United States, will be a great impediment to the development of British enterprise, as the grand object of the Americans is evidently to obtain a large revenue from the extensive mines in the different districts themselves; to facilitate which, which a project is to be submitted to Congress for the immediate laying down of a railway from the city of Mexico to Vera Cruz, and cutting good roads into the mineral districts of the republic, and to give every encouragement to mining adventurers from the United States, with large concessions, which will be made point, to be ratified by the Mexican authorities, in the event of a peace being concluded between the two republics.

ST. JOHN DEL REY.—A correspondent mentions, that from parties lately arrived from the Brazils, he learns that the principal water-courses, or leats, which work the stamps belonging to this company, are likely to be cut off, as they belong to an adjacent estate, the proprietor of which has hitherto allowed the gratuitous use of the water; but, on account of some difference with the present management at the works, every obstacle is thrown in the way of the company, and the latter will, probably, have to pay a considerable sum of money, or the works, it is feared, will come to a stand.

Last week, the Burra Burra shares of the South Australian Mining Association got up to 102*l.* 10s. on receipt of advices, per *John Bartlett*. They are now at 105*l.*, cash buyers; but many shares have changed hands at 200*l.* for payment in three years, with interest in the meantime at 6 per cent. per annum. Our colonial readers know, that dividends to the amount of the whole original capital have already been paid; and a third dividend (namely, 100 per cent.) will be payable in a few days.—*Adelaide Observer*, Aug. 7.

MORSE'S TELEGRAPH IN TURKEY.—A model of this telegraph has been exhibited, and fully worked, before the Sultan, in one of the halls of the palace, at which he expressed himself highly gratified. After two hours' attention to it, he requested it might remain until next day, for exhibition before the ministers and viziers. The Sultan afterwards decreed a diploma and decoration for Professor Morse.

BRIDGE OF THE NIAGARA FALLS.—In the *Mining Journal*, of 22d ult., we inserted a notice of a proposed suspension-bridge across the falls; thus uniting Canada and the United States. We now learn, that, after being several days in session, the company have decided on its immediate construction, for the passage of railway trains. The supporting chains are to be tested to 6500 tons, the cost not to exceed $190,000, and the bridge to be complete by May 1st, 1849. Mr. C. Ellet, jun., of Philadelphia, is appointed engineer. This noble erection will be 800 ft. span, 230 ft. above the water, and will command a view of both the falls and the whirlpool.

ANTHRACITE, AS FUEL IN LOCOMOTIVE ENGINES.—An endless fire-bar, revolving on two rollers, similar to Jukes's patent in England, which we have often noticed, has been introduced in America, to locomotive fire-boxes, by Mr. W. G. Henniss, of Pottsville, for the consumption of anthracite coal; and, it is said, the invention has met with complete success, and the decided approval of scientific men.

CALEDONIAN RAILWAY.—We understand that, although the mail trains on the Caledonian commence to run at rates, varying from 16 to 17, or 18 hours, betwixt Edinburgh, Glasgow, and London; yet, on, and after, the 1st of March, express trains will run betwixt London, Edinburgh, and Glasgow, in 13 hours; betwixt Liverpool and Manchester, and Edinburgh and Glasgow, in 8 hours; and between Birmingham, Edinburgh, and Glasgow, in 9½ hours.—*Caledonian Mercury.*

WEST CORNWALL RAILWAY.—A large number of the shareholders in this company, who had no confidence in the management of the present directors, having met, and appointed Mr. Gurney, of Launceston, and Mr. W. D. Wills, of Bristol, as a deputation to proceed to London, and have an interview with them, again met on Friday last, at the White Hart, Launceston, to hear the report of the deputation. Mr. Gurney entered into an elaborate and detailed statement of the proceedings that had taken place in London; where, though it was generally agreed, that if the undertaking were properly managed, it would be a very profitable one, it was admitted by all that no confidence could be placed in the present directory. This was attributed, first, to the fact, that when the undertaking was announced, and there was not the least difficulty in getting the capital, nearly 5000 shares were reserved, and no deposits paid on them; and, secondly, to the fact, that they had spent nearly 80,000*l.* on this line, of from 24 to 28 miles, without making any progress, or doing anything else, after passing the bills, then pay the directors and their staff. The attendance of the shareholders was requested at the next general meeting, when a new body of directors would be proposed.—*Plymouth Journal.*

Dreadful Accident from the Bursting of a Boiler at Manchester—Eight Lives Lost.—Our Manchester correspondent, writing yesterday afternoon, informs us of a dreadful accident, which has occurred in that town, from the bursting of a boiler at the manufactory of Mr. Thomas Riley, spindle and flymaker, Medlock-street, Ardwick. The catastrophe occurred about half-past eight o'clock yesterday morning, and eight human beings, varying from 20 to 30 years of age, were sent to their last account, without a moment's warning. Five of the unfortunates were workpeople, in the employ of Riley, the owner of the boiler. Two children, belonged to a butcher, named Wardsworth, resident in the neighbourhood; and another was the child of a blacksmith, whose forge was in the same yard as Riley's manufactory, and which was also completely destroyed. There were others seriously hurt, and they lie at the Manchester Infirmary in a dangerous state. It was currently reported in the neighbourhood of the accident, that the boiler has been considered in a dangerous condition for some time past, and that people have refused to work at the manufactory in consequence. It was, therefore, thought proper to take Riley into custody. Another thing which tells against him is, that the person whom he employed to take charge of the engine, was a boy, only 15 years of age. This boy's name was Joseph Atkinson, and he was killed. The accident has, of course, caused great excitement in Manchester, and the inquest, which will, doubtless, be held this day (Saturday), is looked forward to with great anxiety.

MINING IN SOUTH AUSTRALIA.

We have pleasure in directing attention to a very important communication, which we received yesterday, from our intelligent correspondent in South Australia, and inserted in another column of this day's Journal. So much of mis-statement, and vague assertion, having appeared with respect to mining in that colony, an authentic report on its actual position, by one so evidently well qualified, must prove of general interest, and great value to those immediately concerned.

THE COMBEMARTEN MINE.—Some very beautiful specimens of articles of ornament, and also of utility, have recently been manufactured by Mr. H. Ellis, silversmith of Exeter, from the silver extracted from the ore of the Combmarten Mine, North Devon. They consist of baskets, napkin holders, &c., and are of elaborate workmanship—being elegant in design, and very delicate in the finishing. Her Majesty the Queen has extended her patronage to the manufacturer, and, besides other things, has become the purchaser of several elegant brooches, for which Mr. H. Ellis has obtained a registered right under the Act 6th and 7th Victoria, c. 65. These brooches are very ingeniously constructed, and are so contrived, that any shawl, or portion of the dress fastened by them, cannot be loosened, except by removing the brooch; nor can the brooch be removed either by accident or force, unless so great as to break it. The pin, or tongue of it, is secured by passing through a groove, and the point is received into a small sheath; a chain depends from the pin, which must be drawn perpendicularly, or in a straight line with the pin, to extract it from its position. The contrivance is difficult to be described by words; but is, nevertheless, so simple as to be understood directly it is seen; and it may be seen at the agents of the inventor, Messrs. Green and Banks, Hatton-garden. It can be made of gold and ornamented in any manner. The silver extracted from the lead ore of the principal lode in Combemarten Mine, is, on an average, of 60 ozs. of silver to a ton of lead; this is considered as a very fair proportion.

NEW AERONAUTIC SHIP.—A letter from Rotterdam, dated the 7th inst. states that M. F. L. de Ruijter has invented an aeronautic, a consequence which is far preferable to that of M. Montomagor, of Madrid, as M. Ruijter's construction, instead of requiring the power of the balloon, rises into the air from the impetus of its own working, with a weight of 200,000 Netherland pounds, with immense rapidity, and can be steered at will. M. de Ruijter will soon exhibit some experiments with a small model, 1 ell 57 inches in breadth, 83 ells 14 inches long.

THE OAK FARM WORKS.—A meeting of creditors of the Oak Farm Company is called for this day, at Doe's Hotel. The result is looked to with the deepest interest, as it is understood, that certain important matters will be submitted, involving, we regret to say, the bankruptcy of the concern. We trust, however, for the welfare of the district, the interests of the body of creditors, and the good faith of the parties concerned, that some arrangement will be devised, to save the company from so ruinous an alternative.—*Birmingham Journal* (this day).

Six of Mr. Forster's puddling-furnaces, at the Old Forge, commenced working on Thursday, and we understand the example will be followed by other furnaces throughout the district, in the course of next week.—*Ibid.*

ROYAL COPPER MINERS' COMPANY OF ENGLAND.—A meeting of shareholders in this company was advertised to be held on February 11th, at Radley's Hotel, Bridge-street, Blackfriars, at which our reporter attended, but was refused admission—it being alleged that the meeting was strictly private.

Current Prices of Stocks, Shares, & Metals.

STOCK EXCHANGE, Saturday morning, Eleven o'clock.

Bank Stock, 9 per Cent., 209 200	Belgian Bonds, 4½ per Cent., 91
3 per Cent. Reduced Ann., 89¾ ¼	Dutch, 2½ per Cent., 54 ⅝
3 per Cent. Consols Ann., 89 ⅜ 9	Brazilian, 5 per Cents., 85½
3 per Cent. Annuities, —	Chilian, 6 per Cents., 92½
3½ per Cent. Ann., 90½ ⅝ ¼	Mexican, 5 per Cents., 18½
Long Annuities, 9 1-16	Spanish, 5 per Cents., 21½
India Stock, 10½ per Cent., 241 3	Ditto 3 per Cents., 32 ¼
3 per Cent. Consols for Acc., 89¼ ⅛ ¼	Portuguese, 4 per Cents., 26 ⅝
Exchequer Bills, 1000*l.* 3d., 21 18 pm.	Russian, 5 per Cents., 110½ ⅝

MINES.—During the week an average amount of business has been transacted, especially in our dividend-paying mines, and those on the eve of doing so.

From our country correspondents, we learn that several mines have considerably improved; and it is manifest that, with a fair standard for our copper ores, we should find the mining interest in a flourishing and satisfactory position. Since our last, the standard has been advanced; slight as it was, it must have been gratifying to all interested in this great measure, as it encourages the *hope* that a more favourable period is approaching; and we ardently trust, that that season is not far distant when we shall find all parties united in promoting the welfare and prosperity of this great national interest.

It is with regret we learn, that the English Copper Company have ceased to purchase during the past few weeks, and more especially that they should have declined to accept their bills, now coming due. However unfavourable the omen may appear, we have every reason to believe they will be duly honoured.

The directors of Carn Brea paid, on Tuesday, 2*l.* per 1000th share, being the sixtieth dividend paid since her recommencement.

Business has been done in Devon Great Consols since our last, and we find negociations are still going on for several more, as well as in East Wheal Rose, North Roskear, North Pool, Carn Brea, South Wheal Francis, and Treviskey and Barrier. Herodsfoot has improved in the 62 fm. level north, where they have a fine course of ore, with backs of upwards of 24 fms. of maiden ground.

Devon Great Consols is reported to have considerably improved in Hitchen's shaft, at Wheal Josiah, the lode being worth 80*l.* per fm.; last week it was estimated worth 60*l.*

Wheal Franco has been sought for at an advance on our last quotations, in consequence of the general improvement in this mine, but more particularly from the cutting the lode good in the 47 fm. level.

Holmbush and Condurrow are reported to have considerably improved of late. Mendip Hills have been in request, and several transactions effected. A large number of Bedford United shares have also changed hands. Tavy Consols have been done at an advance, and they are still progressing; it is anticipated that a dividend will be declared in June.

In foreign shares there have been several transactions since our last, especially in the following mines—viz.: St. John del Rey, Real del Monte (as well as the loan notes), Asturian, Bolanos, Barossa Range, Imperial Brazilian, Alten, &c. The dispatches received from the Barossa Mines are of a very satisfactory and highly favourable character, and we have no doubt these mines will take a high stand among the Australian Mines.

We learn that the North British Australasian Company (who are also the proprietors of the Kawaw, and large holders of the Bonaccord Copper Mines,) have been advised of a sale of a portion of land in the colony, realizing 6000*l.*, which had hitherto been considered of but little value by the company. This important piece of information created a demand for, and rise in, the price of, shares.

Shares in the following mines have been sold during the week—viz.: South Tolgus, Tavy Consols, Bedford United, Franco, Plymouth Wheal Yeoland, Treviskey and Barrier, Devon Great Consols, Trehane, Great Roughtor, Herodsfoot, Mendip Hills, Treleigh, Condurrow, East Wheal Friendship, South Wheal Betsey, Callestock, South Wheal Basset, &c. &c.

Arrivals of specie since our last:—Southampton, Feb. 3d.—*Ex* Peninsular and Oriental Company's ship *Jupiter*, 16 packages of specie, value, 12,700*l.* 7th, —Peninsular and Oriental steam-ship, *Erin*, from Mediterranean, 22 packages of specie, valued 59,758*l.*, and general cargo. 9th.—*Ex New York* and *Waterloo* at Liverpool, from America; the former, with 12,000*l.*, and the latter 22,000*l.* value, in specie.

RAILWAYS.—There was nothing of interest to record in the proceedings of the market on Monday; a slight depression in the public funds affected it in like manner. On Tuesday, no improvement could be noticed; and, in many instances, orders to purchase were suspended. Business remained much in the same state on Thursday and yesterday, although things were certainly not worse than in the earlier part of the week; business was contracted in amount, and without any prospect of improvement.

MEETINGS.—WAVENEY AND GREAT YARMOUTH: to lay before shareholders situation of affairs. Receipts had been 35,875*l.*; and expenditure, 31,492*l.*: leaving a balance in favour of the company of 4382*l.*—KILLARNEY AND VALENTIA: not having made the necessary arrangements, it was decided to adjourn to the 15th of April.—LANCASTER AND CARLISLE: from the opening of the line to 31st Dec. last, the receipts had been 76,419*l.*: leaving a credit balance of 43,800*l.* A dividend was declared of 20s. per share, and 4s. per third.—GREAT NORTH OF ENGLAND: half-yearly; dividends on the several descriptions of shares were declared, equal to 10 per cent. per annum.—LIVERPOOL, MANCHESTER, AND NEWCASTLE JUNCTION: to consider the propriety of proceeding or otherwise; adjourned to 30th of March next.—SALISBURY AND YEOVIL, AND YEOVIL AND EXETER: resolutions passed in favour of presenting petitions to Parliament, for the construction of these lines.—VALE OF NEATH: half-yearly; the South Wales Railway had agreed to subscribe for 6389 shares. The works in the lower part of the valley were expected to be open in 12 months; the receipts had been 104,970*l.*; and expenses, 30,085*l.*: leaving a balance of 74,885*l.*

HULL, THURSDAY.—The unfavourable half-yearly report of the Brighton Company, and a rumour that the London and North-Western will only pay at the rate of 8 per cent., have contributed, with other circumstances, to throw a slight shade of gloom over the share market, which, however, we hope the full result of the meetings will clear away. It is imperative on all boards of direction to have no mystification as to their exact position—especially as there is a feeling abroad to make the most of any disposition of this kind to the detriment of the holders of stock. Darwens, which declined the other day to 10*l.* to 10½*l.* dis., owing to a sale under peculiar circumstances, have since recovered, and may now be marked 10*l.* to 9½*l.* dis. North British flatter. Dock shares have changed hands during the week, at about 182*l.* ex. or 190*l.* with, dividend—at which rates buyers and sellers might still be found.

RAILWAY TRAFFIC RETURNS.

Name of Railway.	Lgth. Rway.	Present actual cost.	Price per share	Last Div.	*Traffic Returns.* 1848	1847
Arbroath and Forfar	16	£179,939	26	4 p.c.	—	211
Birkenhead, Lancashire, & Chesh.	15	706,793	38½	—	£662	477
Dublin and Drogheda	35	733,655	52	3½	657	655
Dublin and Kingstown	7½	473,282	—	7	689	647
Dundee, Perth, & Aberdeen Junc.	47½	285,745	30	6	662	301
East Anglian (Lynn to Ely)	26½	908,892	12	—	432	—
East Lancashire	24	1,207,490	21½	—	1052	519
Eastern Counties	302½	7,698,370	15½	5	10473	9145
Eastern Union	50	979,926	45	—	1082	826
Edinburgh and Glasgow	53	2,375,745	43	6	3274	3062
Edinburgh and Northern	29	953,207	21	—	612	—
Glasgow, Paisley, and Ayr	64½	1,890,547	72	7	1634	1651
Glasgow, Paisley, & Greenock	23	838,964	17½	3	913	953
Gt. Southern & Western, Ireland	110½	1,876,326	24½	—	1754	940
Great Western	269½	10,630,763	101½	8	16839	16209
Kendal and Windermere	10½	147,001	23	—	91	—
Lancaster and Carlisle	70	1,291,913	53	—	1038	—
Lancashire and Yorkshire	92½	6,807,314	88½	7	7902	7956
London and North Western	428	20,010,467	146	9	34956	34443
London and Blackwall	4	1,146,289	6	¾	636	714
London, Brighton, & South Coast	152½	5,659,180	37½	4	6202	5290
London and South-Western	186	5,836,132	50½	9	6576	5174
Londonderry and Enniskillen	14½	160,013	16	—	135	—
Manchester, Sheffield, & Lincolnsh.	46	2,078,135	80	5	1990	1734
Maryport and Carlisle	28	424,417	—	3	523	567
Midland Company	402½	8,658,604	114	7	17944	16817
Midland Great Western (Irish)	36½	583,776	—	—	607	—
Newcastle and Carlisle	65	1,184,080	117	6	1974	1837
Norfolk	81½	1,375,633	80	6	1611	1290
North British	78	2,514,150	26	5	1716	1295
Shrewsbury and Chester	17	591,158	17	—	504	296
South Devon	29	1,339,860	23	—	633	381
South-Eastern	165½	6,398,218	30½	6	6364	6239
Taff Vale	38	785,607	—	5½	1541	1262
Ulster	25	646,211	52	6	583	719
Whitehaven Junction	12	130,000	—	4½	155	—
York, Newcastle, & Berwick	236½	3,685,102	35	9	9843	7940
York and North Midland	230½	3,196,969	76½	10	5654	5003
FOREIGN RAILWAYS.						
Amiens and Boulogne	68½	573,338	13½	4	910	—
Antwerp to Ghent (monthly)	31	—	—	—	1100	—
Belgian ditto	—	—	—	—	46247	43741
Dutch Rhenish	57½	—	1½	—	—	829
Northern of France	211	2,000,000	11½	4	12275	8503
Orleans to Bourges (Central)	107½	—	—	—	2218	—
Orleans to Tours	72	600,000	—	5	2410	2398
Paris and Orleans	82	2,011,720	47½	12½	6797	6302
Paris and Rouen	88	2,082,916	35½	9½	5746	5742
Rouen and Havre	59½	—	17	4	2272	—
Strasburgh and Basle (monthly)	88	—	8	1½	5882	—
West Flanders ditto	—	—	1½	—	964	—

Total earnings for last week, £177,352, being an increase of £12,527 over last year.

THAMES TUNNEL COMPANY.

The number of passengers who passed through the Tunnel in the week ending Feb. 5, was 16,384; amount of money, £98 5s. 4d.

LATEST CURRENT PRICES OF METALS.

LONDON, FEBRUARY 11, 1848.

	£ s. £ s. d.		£ s. £ s. d.
IRON—Bar *a*..Wales..*ton*	0 0—7 5 0	COPPER—Ord. bottoms ..	0 0—0 11½
,, ..London ..	0 0—8 10 0	YELLOW METAL SHEATHING	0 0—0 0 8½
Nail rods ,, ...	0 0—9 5 0	TIN—Com. blocks *g*..*cwt.*	4 0—4 2 0
Hoop (Staf.) ,, ...	0 0—10 10 0	,, bars	4 1—4 3 0
Sheet ,, ,, ...	0 0—11 10 0	Refined	4 4—4 6 0
Bars ,, ,, ...	9 10—10 0 0	Straits *h*	0 0—3 16 0
Welsh cold-blast foundry pig ..	4 0—4 10 0	Banca	0 0—4 4 0
Scotch pig *b*, Clyde	0 0—2 10 0	TIN-PLATES—Ch., IC *i*, box	1 8—1 10 0
Rails, average	0 0—7 10 0	,, IX ...	1 14—1 16 0
Chairs	0 0—5 5 0	Coke, IC	1 4—1 5 0
Russian, CCND *c*..	17 10—18 0 0	,, IX	1 10—1 11 0
,, PSI	0 0— ——	LEAD—Sheet *k* ....*ton*	0 0—19 0 0
,, Gourieff	0 0— ——	Pig, refined	18 15—19 0 0
,, Archangel	0 0—13 10 0	,, common	17 10—17 15 0
Swedish *d*, on the spot	0 0—11 5 0	,, Spanish, in bd.	0 0—17 0 0
,, Steel, fagt.	0 0—16 5 0	Red	0 0—19 10 0
,, ,, kegse	0 0—14 0 0	Dry White	0 0—24 0 0
COPPER—Tile *f*	0 0—92 0 0	Shot (Patent)	0 0—20 10 0
Tough cake	0 0—93 0 0	SPELTER—(Cake) *l* on spot	19 5—19 10 0
Best selected	0 0..96 0 0	,, for arrival	0 0—19 0 0
Ordin. sheets, *lb.* ...	0 0—0 10½	ZINC—(Sheet) *m* export.*	26 0—27 0 0
		QUICKSILVER *n* ......*lb.*	0 0—0 4 6

a Discount 2½ per cent. *b* Net cash. *c* Discount 2½ per cent. *d* Ditto *e* In kegs ½ and ¾-inch. *f* Discount 3 per cent. *g* Ditto 2½ per cent. *h* Net cash in bond. *i* Discount 3 per cent. *k* Ditto 2½ per cent. *l* Net cash. *m* Discount 1½ per cent. *n* Discount 1½ per cent. * For home use it is 32*l.* per ton.

* Those marked with an asterisk (*) are dividend per share.

[FROM OUR CORRESPONDENTS.]

IRON.—Welsh is about 5s. higher than last week, owing to an improved demand. Of Staffordshire, our quotations must be considered nominal—the stocks being low, owing to the men still remaining out on strike; the holders will not sell at the proposed reduction, until they see their way clear to replace. Scotch is rather dull again. In foreign nothing doing.

COPPER has been rather more in demand since the late reduction.

TIN has been unsettled within the last few days, by some sales under the established rates—viz., at our lowest quotations; but whether or not this will lead to a general reduction among the smelters, is uncertain—a few days, at most, will determine this.

TIN-PLATES, of coke quality, have been in request during the last 10 days, and we quote them at an advance of 1s. per box.

SPELTER continues dull as to demand, but holders are firm as to price; a parcel of 80 tons, but not held by a dealer, was sold this week at 19*l.* 5s.

GLASGOW, FEB. 10.—We have had a dull market in pig-iron for the last week—the price, however, continues firm at our last quotations—viz., 50s., cash, for mixed Nos. A shade less is reported to have been accepted for cash down.

COAL MARKET, LONDON.

PRICE OF COALS PER TON AT THE CLOSE OF THE MARKET.

MONDAY.—North Percy Hartley 18—New Tanfield 15—Ord's Redheugh 16—Tanfield Moor 16 6—Townley 16 6—Wylam 17—Wall's End Gosforth 18 9—Braddyll's Hetton 20—Haswell 21—Hetton 20 6—Lambton 20—Shotton 20—Stewart's 20 9—Seymour Tees 19—Sidney's Hartley 18 9.—Ships at market, 238; sold, 79.

WEDNESDAY.—Adair's Main 16—Buddle's West Hartley 17 6—Chester Main 16—Dipton Tanfield 14—Hasting's Hartley 17 6—New Pelton Main 14 6—New Tanfield 14 6—Townley 16 3—Wylam 17—Wall's End Hedley 17—Hilda 16 9—Killingworth 17—Eden Main 18 9—Braddyll's Hetton 18 6—Haswell 20—Keepier 18 6—Stewart's 19—Hudson's Hartlepool 18—High Thornley 16 6—Trimdon 17 6—Denison 17 6—Seymour Tees 18 6—Tees 19—West Hetton 17 6—Howard's West Hartley Netherton 17 6.—Ships at market, 289.

FRIDAY.—Adair's Main 15 6—Chester Main 15 9—Carr's Hartley 16 6—Davison's West Hartley 16 6—Dipton Tanfield 13—Hasting's Hartley 17—North Percy Hartley 16—New Tanfield 14 6—South Peareth 15—Tanfield Moor 16 3—Wylam 16 6—West Wylam 16 6—West Hartley 16 6—Wall's End Hotspur 15 9—Hedley 17—Killingworth 17—Northumberland 15 9—Washington 15 6—Eden Main 18 6—Belmont 17 6—Braddyll's Hetton 18 3—Bell 17—Burnhope 15 6—Keepier 18 6—Lambton 18 3—Lumley 16 6—Russell's Hetton 18 3—Richmund 17 3—Stewart's 19—Cassop 18 3—Caradoc 18 3—Castle Eden 17 6—High Thornley 15 6—Kelloe 18—Trimdon 17—Adelaide Tees 18—Gordon 16—South Durham 16 6—Whitworth 15 6—Blaengwaur 22—Cowpen Hartley 16 6—Howard's West Hartley Netherton 16 6—Old Haigh Moor 15.—Ships at market, 365; sold, 102; unsold, 263.

NEW PATENTS.

R. Fowles, gent., North Shields, Northumberland, for improvements in propelling.

J. Bird, gent., Cwm Avon Works, Taiback, Glamorgan, for certain improvements in liquid measures.

G. A. Erman, Manchester, cotton-spinner, for certain improvements in machinery or apparatus for twisting cotton or other fibrous substances.

R. C. Burleigh, gent., Featherstone-buildings, Middlesex, for improvements in burners for obtaining or producing light and heat, and in apparatus to be used therewith.

J. Brett, Hanover-square, Middlesex, for improvements in electric printing and other telegraphs.

W. H. Glover, Stone Bridge, Chester, for improvements in the manufacture of oil from blubber.

J. N. Zearman, Greenwich, Kent, for improvements in ships and other vessels.

W. Sangster, Regent-street, Middlesex, for improvements in umbrellas and parasols.

L. Hebert, Ryde, Isle of Wight, C.E., for improved machinery for reducing, grinding, and sifting bark, sugar, coffee, seeds, and other substances.

W. P. Piggott, Oxford-street, and Wardrobe-place, Doctors' Commons, for certain improvements in nautical instruments, and in the manufacture of cases for containing instruments, goods, or merchandise.

J. M. Magnin, Villefranche, Rhone, France, avocat, for improvements in machinery for sewing, embroidering, and for making cords or plats. (Being a communication.)

F. Douche, Rouen, France, for certain means, processes, and apparatus for preventing in many cases the escape of heat through boilers and apparatuses, and for saving and applying the lost heat in general, and sometimes direct heat, to many useful purposes.

W. J. Cannon, Cambridge, solicitor, for improvements in the construction of carriages for the conveyance of sheep, and other animals on railways.

G. A. Buckhobz, gent., Forston-street, Middlesex, for improvements in obtaining motive power.—*Mechanics' Magazine.*

JOINT-STOCK BANKS.

Shares.	*Companies.*	*Paid.*	*Div. p. cent.*	*Price.*
22,500	Australasia	£40	£3	£15
20,000	British North American	50	6	43 45
20,000	Colonial	25	5	14½
—	Commercial of London	20	6	20 22
4,000	Ionian State	25	6	24½ 25
60,000	London Joint-Stock	10	6	16
30,000	London and Westminster	20	6	25
10,000	National Provincial of England	35	5	36
20,000	National of Ireland	22½	5	19¼ 19¾
20,000	Provincial of Ireland	25	8	40 42
4,000	Ditto New	10	8	15 16
20,000	Union of Australia	25	6	23 25
10,000	Ditto New	2½	6	2¼ 2½
60,000	Union of London	10	5	10 10½

MISCELLANEOUS COMPANIES.

Shares.	*Companies.*	*Paid.*	*Div. p. cent.*	*Price.*
10,000	Assam Tea Company	£20	—	£ 3
1,080	Auction Mart	—	£ ¼	28
10,000	Australian Agricultural	30	1	22
10,000	Australian Trust	35	—	30
8,000	British Alkali	25	4	16¾
10,000	British American Land	35½	—	14
8,600	British Rock and Patent Salt	35	18	11
8,915	Canada	32½	6	31
—	City Bonds (Navigation)	—	3½	89
1,800	Corn Exchange	37½	1½	26½
5,000	Droitwich Patent Salt	25	¾*	11
2,700	Equitable Reversionary	95	4½	90
—	General Reversionary Interest	100	5	100 105
6,000	General Steam Navigation	14	1¾*	24¾
—	Hudson's Bay Stock	—	10	230 240
2,100	Hungerford Market	100	¾	45
1,500	London Commercial Sale Rooms	—	1½	31 32
6,000	London Reversionary	22	—	23 24
300	Margate Pier	—	10	196
10,000	Mexican and South American	7	—	3½ 4
20,000	New Brunswick	75	—	—
11,600	Peninsular and Oriental Steam	50	7	59½
6,600	Ditto	40	—	—
5,387	Reversionary Interest Society	100	4½*	95
—	Royal Mail Steam	—	5½	48½
8,000	South Australian	25	6	—
20,000	Upper Canada	100	5	93 94
20,000	Ditto	—	5	93 91
10,000	Van Diemen's Land	20	—	4

PRICES OF MINING SHARES.

BRITISH MINES.

Shares.	Company.	Paid.	Price.
1000	Abergwesain	7	—
512	Albert Consols	1	2½
1024	Alfred Consols	4½	30
256	Alternum Consols	2	15
235	Andrew and Nangilles	28½	11½
1624	Balleswidden	9	18
128	Balnoon Consols	25	25
10000	Banwen Iron Co.	2	—
1000	Barristown	4½	10
4000	Bedford	2½	3¾
128	Besore Lead Mine	14	10
315	Birch Tor Tin Mine	24½	—
8000	Blaenavon	50	23
100	Botallack	175	80
120	Brewer	5	7
10000	British Iron, New, regis.	10	11-11½
—	Ditto ditto, scrip	10	12
128	Budnick Consols	52½	40
128	Burthy	20	21
100	Bwlch Cwmerfin	20	—
128	Callestock	17	30
1000	Callington	19	32
20000	Cameron's Steam Coal	4	5½-¾
256	Caradon Copper Mine	9½	2
256	Caradon Mines	22½	17
256	Caradon United	24	5
256	Caradon Wh. Hooper	21	15
1000	Carn Brea	15	105
2048	Cascade	1	2
112	Charlestown	220	30
166	Cleveland	9	5
512	Coatlithe Hill	½	2
1900	Combmartin	7½	3
500	Comblawn	5½	6
128	Comfort	45	90
256	Condurrow	20	31-2
2560	Cook's Kitchen	14	2
2048	Coombe Tin Mine	4½	2
1000	Coombe Valley Quarry	2	3
1000	Copper Bottom	1	1
1024	Cosheen	4½	20
240	Craddock Moor	15½	15
128	Creeg Braws	120	100
500	Cubert Mine	12½	15
2048	Dartmoor Consols	3	2
300	D. Prior & Buckfastleigh	14	26
7500	Demelza Mines	2	2
7100	Derwent	8½	5
1024	Devon & Courtenay Con.	7½	3
1024	Devon Great Consols	1	210-15
1000	Dhurode	2	5
186	Dolcoath	30	50
2560	Drake Walls	4	4
10000	Durham County Coal	45	9
3000	Dyfngwm	10	12½
256	East Alvenney	10	25
112	East Caradon	42	42
2048	East Crowndale	5½	4½
512	East Combe Silver-Lead	6½	6½
128	East Pool	5	20
100	East Relistian	22	40
—	East Wheal Albert	1	3
94	East Wheal Crofty	125	280
256	East Wheal Fortune	2	3
1024	East Wheal Friendship	3	3
128	East Wheal Rose	50	1150
2048	East Wh. Rough Tor	¼	2
—	East of Scotland Iron Co.	2½	¼
123	East Wheal Seton	14	15
256	Elborough	1½	2
256	Exmoor Wh. Eliza	3½	6
512	Fowey Consols	40	45
6400	Gadair	2	2
20000	Galvanised Iron Co.	10	9½
10000	Gen. Mining Co. for Irel.	2	1½
2048	Georgia Tin Mines	1½	1¾
256	Gonamena	31½	45
128	Goonvrea	4	1¼
244½	Grambler & St. Aubyn	—	10
100	Great Consols	1000	400
256	Great Callestick Moors	22	25
2560	Great Michell Consols	1½	3½
256	Great Resugga Moor	7	12
512	Gt. Wh. Rough Tor Con.	15½	18
100	Grogwinion	5	—
256	Gwinear Consols	7	18
6000	Heignston Down Con.	½	2½
256	Herodscombe	4½	4½
256	Herodsfoot	16	18
10000	Hibernian	12½	1½
239	Hobb's Hill	6	3
1000	Holmbush	19	11
827	Kirkcudbrightshire	5½	4½
500	Lady Elizabeth	5	5
2048	Lamherooe Wh. Maria	11	4
128	Lelant Consols	90	60
160	Levant	—	90
1000	Lewis	15	6½
1000	Llwyn Malees	5	—
3600	Llynvi Iron	50	50
256	Lostwithiel Consols	15	15
6000	Marke Valley	10	3
5000	Mendip Hills	2½	1½
5000	Merionethshire Slate & Slate Slab Co.	1½	2
20000	Mining Co. of Ireland	7	7½
256	New East Crowndale	3½	3½
128	North Fowey Consols	30	30
100	North Pool	45	475
70	North Roskear	10½	310
256	North Wh. Abraham	1	1
262	North Wh. Leisure	1½	2
128	North Wh. Providence	2½	3
15000	Northern Coal Co.	23	2
128	Par Consols	—	1000
4000	Pennant	1½	1½
100	Penrhiw	30	65
1280	Perran St. George Un.	13	20
128	Perran Wh. Virgin	9½	15
512	Plymouth Wh. Yeoland	4½	21
256	Polsaith Consols	4½	7
112	Providence Mines	35	45
10000	Rhymney Iron	50	20
10000	Ditto New	7	6⅞
256	Rose Consols	10	2
1000	Rosewall Hill	1	5
256	Rosewarva Mines	—	12
—	Shotts Iron Company	50	55
2500	Silver Valley	5½	2
1100	South Dolcoath	3	2¼
128	South Caradon	10	450

BRITISH MINES—*continued.*

Shares.	Company.	Paid.	Price.
256	Sth. Friendsh. Wh. Ann	16	25
200	South Harvannah	10	25
256	South Tolgus	7½	50-2½
256	South Trelawney	20	8½
128	South Yeoland	16½	20
128	South Wheal Basset	110	85-90
256	South Wh. Betsey	2½	5
124	South Wh. Francis	160	200
256	South Wh. Hope	—	5
1000	South Wh. Maria	2½	2
256	South Wheal Rose	11½	1
256	South Wh. Sophia	4	4½
10000	Southern & Western, Irish	2	4
280	Spearne Moor	30	40
256	St. Austell Consols	9	6
94	St. Ives Consols	—	320
128	St. Michael Penkivel	5	10½
999	St. Minver Consols	1	6
1000	Stray Park	43	17½
9600	Tamar Consols	3	4
1024	Tavy Consols	4	13
6000	Tincroft	7	8
1000	Tin Vale	2	12
128	Tokenbury	143½	10
256	Trehane	2	25
5000	Treleigh Consols	6	3
2000	Trenance	2	50
96	Tresavean	10	250
120	Trethellan	5	16
120	Treviskey and Barrier	130	140
288	Trevean	1½	25
128	Trewellard	12	26½
100	United Mines	300	350
256	Wellington Mines	15	30
128	West Basset	45	30
256	West Caradon	20	120
128	West Cargoll	2	12
512	West Fowey Consols	40	15
256	West Providence	9	25
200	West Seton	40	150
—	West of Scotland Iron Co.	210	210
120	West Trethellan	5	30
256	West Wh. Friendship	9	12
3845	West Wheal Jewel	11	1½
2560	West Wh. Maria	3	1½
256	West Wheal Shepherd	5	2½
256	West Wheal Tolgus	21½	5
256	West Wheal Treasury	19	10
5200	Wicklow Copper	5	12½
184	Wheal Adams	51	10
1000	Wheal Agar	—	10
256	Wheal Albert	10	8
128	Wheal Acland	13	2
256	Wheal Allen	2	5
240	Wheal Anderton	21	28
128	Wheal Ann	—	50½
512	Wheal Ann, Bridford	1	2
512	Wheal Anna Maria	—	5
1024	Wheal Ash	4½	8
120	Wheal Bal	5½	20
2560	Wheal Barbara	1½	4-5
256	Wheal Benny	10½	6
256	Wheal Blencowe	21	5
256	Wheal Bucketts	20	5
256	Wheal Calstock	3	8½
136	Wheal Clifford	190	190
1024	Wheal Coad	½	5
128	Wheal Courtenay	—	20
6000	Wheal Curtis	2½	2¾
256	Wheal Dyke	12	13
256	Wheal Fortescue	6½	5
512	Wheal Fortune Consols	3½	6½
2048	Wheal Frederick	2	2
388	Wheal Franco	27	30
128	Wheal Harriet	45	50
256	Wheal Jane	21	15
256	Wheal Louisa	8½	8
112	Wheal Margaret	79	250
512	Wheal Mary Ann	5	17
256	Wheal Mary Consols	38	25
210	Wheal Prospect	4	7
120	Wheal Reeth	27	80
128	Wheal Rose	60	15
2048	Wheal Samson	½	20
99	Wheal Seton	214	1000
256	Wheal Sisters	29½	20
256	Wheal Sophia	5½	10
128	Wheal Spearne	10	75
128	Wheal St. Ann	9	15
260	Wheal Trelawney	7½	95
256	Wh. Tremaine (St. Ervan)	4½	20
256	Wheal Tremayne	35	25
128	Wheal Trew	20	21
256	Wheal Trevenna	3	4
92	Wheal Tryphena	140	265
121	Wheal Venland	29½	30
256	Wheal Vlow (Perranz.)	¾	¾
184	Wheal Vyvyan	—	60
256	Wheal Williams	6	12

FOREIGN MINES.

Shares.	Company.	Paid.	Price.
5000	Alten Mining Company	14½	3½-4
15000	Asturian Mining Co.	12	4-4½
20000	Australian	2½	3½
10000	Anglo-Mexican Co.	100	2
12374	Ditto Subscription	25	2½
6000	Barossa Range	¾	2
3000	Bolanos	150	3¾
2000	Ditto Scrip	15	3¾
12000	Brazilian Imperial	23	7½
10000	Cobre Copper Co.	40	18
8500	Colombian Co. regis.	55	1
5000	Ditto Scrip	5½	
5000	Copiapo Mining Co.	14	2½
10000	General Mining Ass'n.	20	13¾
5000	Kinzigthal Mining Ass.	2	3¾
20051	Mexican Company	59	—
2000	Mexican & South Amer.	7	1¾
5000	Mocaubas & Cocaes	30	6
29320	Rl. del Monte, regis. / Ditto unregistered	28½	1½
	Ditto Red Debentures	—	10
	Ditto Black ditto	—	8
	Ditto Loan Notes	150	60
7000	Royal Santiago	10	6
2000	Pachuca Mines	4	4½
11000	St. John del Rey	15	6½
13174	United Mexican	Av. 28½	1½

SOUTH AUSTRALIAN SHARE MARKET—AUG. 6.

Company.	*No. of Shares.*	*Capital.*	*Paid-up.*	*Present Price.*
Burra Burra	2464	£12,320	£12,320	£110 scr. / 165 cer.
Princess Royal	400	20,000	14,800	70 0
Adelaide	2000	10,000	10,000	4 10
North Kapunda	436	21,800	21,800	12 10
Royal Mining Company	10000	100,009	10s. p. sh.	0 12
Wakefield	500	1,000	£1,000	1 0
Greenock Creek	300	1,000	1,000	6 0
Poonawurta	1000	2,500	2,500	0 16

**** We should feel greatly obliged by agents, or others interested, furnishing us with such corrections for our Share List as we may not have received through our usual channels of information—our object being, to present as accurate a list of prices as can be obtained—to procure which, we solicit the aid of correspondents in general.*

GAS-LIGHT AND COKE COMPANIES.

Shares.	*Companies.*	*Paid.*	*Div. p. cent.*	*Price.*
5,000	British (London)	£18	£1*	£17½
5,000	Ditto (country)	19	1¾*	23½
1,000	City of London	100	10	290
1,000	Ditto New	100	10	290
4,000	Equitable	50	5	38½
10,000	European	20	1½	18
12,000	Gas-Light and Coke Chartered Co.	50	6	55½ 56½
6,000	Ditto New	10	6*	11 11½
9,000	General United Gas-Light Company	50	2	17½ 18½
10,000	Imperial	50	6	75
46,400*l.*	Ditto Debentures	100	4	100
8,000	Imperial Continental	39½	4½*	54 56
7,000	Ditto New	28	4½*	61
54,500*l.*	Ditto Debentures	100	5	100 102
2,000	Independent	40	6	64
3,000	London	50	6	49 50
3,000	Ditto	50	5	35
9,000	Phœnix, or South London	43	5	31½
1,000	Ratcliff	80	5	80
4,000	South Metropolitan	25	6	30 32

CURRENT PRICE OF GOLD AND SILVER.

Foreign gold, in bars ....per oz.	£3 17 9	New dollars ....per oz.	£0 4 9¾
,, Portugal pieces....	0 0 0	Silver in bars (standard)	0 4 11½

GIRDER BRIDGES.—A novel method of constructing girder bridges has been patented by Mr. H. Sadler, of Holbeck, Leeds; it consists in casting girders of iron deepest in the centre, and forming a semi-arch to each end. Each girder is placed on the piers extending from the centre of one arch to the centre of the next, the two parts of each thus balancing each other, and the ends of every two girders are connected by plates over the centre of each arch. The floors on which the rails are to be laid, he proposes to construct with three ribs, to give the requisite strength, overlapping other plates with two ribs in each; the plates have square studs, and corresponding holes, the former entering into the latter. Holes are formed in the plates, for the purpose of bolting the chains to them.

CEFNCWSG IRON-WORKS.—These works, at present, manifest a more promising aspect than what they have for months past. Several members of the company have visited the place during the week; their presence, words, and actions were very encouraging to the labouring class and the neighbourhood at large. Money is more plentiful than what it has lately proved to be.—*Cambrian.*

LEAD ORES

Sold at the Mine.

Mines.	*Tons.*	*Amount.*	*Purchasers.*
East Wheal Rose	100	£11 15 0	Sims, Willyams, & Co.
ditto	75	12 6 6	ditto
ditto	28	11 11 0	ditto
ditto	28	11 11 0	Walker, Parker, & Co.
Total tons	231		
Sold at Holywell.			
Peel	110	£10 12 6	Walker, Parker, & Co.
Foxdale	50	10 0 0	ditto
ditto	40	10 0 0	ditto
Total tons	200		
Sold at Liskeard.			
Herodsfoot	50	£12 5 6	Walker, Parker, & Co.
Trelawney	80	14 10 0	Sims, Willyams, & Co.
Sold on the Mine.			
Llanfair	40	£24 2 0	Mather & Co.

BLACK TIN.

Sold at Angarrack Smelting-House, St. Erth, Jan. 28, 1848.

Mines.	*Tons cwts. qrs. lbs.*	*Price.*	*Amount.*
Lewis Mines	9 3 1 26	£45 15 0	£419 14 0
ditto	3 7 1 18	41 15 0	140 14 6
Coinage		0 10 0	6 5 6

Total...... 12 tons 10 cwts. 3 qrs. 16 lbs.—Amount......£566 14s.

Mine.	*Tons.*	*Price per ton.*	*Purchasers.*
St. Agnes Consols	6	£37 17 6	Williams and Co.
ditto	¼	22 0 0	Caleniek Smelting Co.

COPPER ORES.

Sampled Jan. 26, and Sold at Andrew's Hotel, Redruth, Feb. 10, 1848.

Mines.	*Tons.*	*Price.*	*Mines.*	*Tons.*	*Price.*
Carn Brea	108	£5 15 0	Wh. Rodney	41	£2 4 0
ditto	106	5 4 0	ditto	34	3 5 6
ditto	100	8 13 0	ditto	18	7 1 6
ditto	93	4 4 0	West Prosper	17	2 8 0
ditto	78	7 10 0	Gwinear Consols	44	2 0 0
ditto	77	11 19 0	ditto	34	1 18 6
ditto	74	11 18 6	ditto	26	0 10 0
ditto	73	4 5 6	ditto	6	5 16 0
ditto	54	8 18 0	South Wh. Fortune	48	5 16 6
ditto	46	9 19 6	ditto	38	9 0 0
ditto	40	1 1 0	Wh. Jane	58	3 13 0
Par Consols	99	5 16 0	ditto	19	1 8 0
ditto	74	7 11 6	Wh. Agar	57	5 1 6
ditto	73	10 0 0	ditto	19	1 8 6
ditto	70	9 8 6	North Wh. Basset	28	4 10 0
Wh. Prosper	61	4 17 6	ditto	24	4 11 0
ditto	41	1 7 6	Wh. Busy	34	2 18 0
ditto	40	4 2 0	East Relistian	31	4 9 6
ditto	38	4 3 0	Wellington Mines	29	4 11 0
ditto	32	3 16 0	Michell's Ore	21	2 19 0
Wh. Tremayne	54	5 7 0	Wh. Vyvyan	15	5 4 6
ditto	32	5 6 6	W. Wh. Providence	12	8 19 0
ditto	29	3 7 6	ditto	3	5 4 0

TOTAL PRODUCE.

Carn Brea	849	£6108 18 6	Wh. Agar	76	£316 7 0
Par Consols	316	2524 10 0	North Wh. Basset	52	235 4 0
Wh. Prosper	212	791 7 0	Wh. Busy	34	98 12 0
Wh. Tremayne	115	557 3 6	East Relistian	31	138 14 6
Wh. Rodney / West Prosper	110	369 14 0	Wellington Mines	29	131 19 0
			Michell's Ore	21	61 19 0
Gwinear Consols	110	201 5 0	Wh. Vyvyan	15	78 7 6
South Wh. Fortune	86	621 12 0	W. Wh. Providence	15	123 0 0
Wh. Jane	77	238 6 0			

Average Standard........£ 97 0 0 | Average Produce 7¾

Average Price per ton £5 17 0

Quantity of Ore .... 2148 tons. | Quantity of Fine Copper, 190 tons 14 cwts.

Amount of Money £12,596 19 0

LAST SALE.—Average Standard......£102 19 0.—Average Produce...... 7¾

COMPANIES BY WHOM THE ORES WERE PURCHASED.

	Tons.	Amount.
Mines Royal	155	£ 865 14 0
Vivian and Sons	427	2824 4 0
Freeman and Co.	391½	2043 17 9
P. Grenfell and Sons	439	1489 8 6
Sims, Willyams, and Co.	335	1821 16 3
Williams, Foster, and Co.	400½	3551 18 0
Total tons	2148	£12,596 19 0

Copper ores for sale on Thursday next, at Andrew's Hotel, Redruth.—Mines and Parcels.—Devon Great Consols, Wheal Josiah, Wheal Maria, Wheal Fanny, and Wheal Anna Maria 1231—West Caradon 300—Marke Valley 261—Fowey Consols 238—Wheal Friendship 228—Bedford United Mines 116—Holmbush 98—Wh. Gorland 34.—Total, 2506 tons.

Copper ores for sale on Thursday week, at Farquharson's Hotel, Truro.—Mines and Parcels.—United Mines 1169—South Caradon 360—Par Consols 334—Tresavean 264—West Wheal Jewel 164—Treleigh Consols 145—Wheal Comfort 75—West Trethellan 43—East Downs 34—South Tolgus 26—Wheal Unity Wood 13—North Downs 10.—Total quantity of ore to be sold, 2637 tons.

COPPER ORES

Sampled Jan. 19, and Sold at Swansea, Feb. 10, 1848.

Mines.	Tons.	Prod.	Stand.	Price.	Mines.	Tons.	Prod.	Stand.	Price.
Cobre	106	14½	88	£10 10 6	Knockmahon	112	7½	97	5 3 0
ditto	101	23½	82	17 2 6	ditto	108	8½	98¾	6 3 0
ditto	96	23	82½	16 13 6	ditto	92	10½	95¾	8 1 0
ditto	87	14	86¾	9 18 0	ditto	91	7¾	102½	5 11 0
ditto	82	14	86¾	9 18 0	ditto	81	7¾	101	5 4 0
ditto	81	14½	87	10 1 0	ditto	79	7½	103½	5 2 0
ditto	8	19¾	84	14 0 0	ditto	70	7½	103½	5 2 6
ditto	105	14½	87	10 3 0	ditto	59	9½	98½	6 17 0
ditto	99	14½	87½	10 4 0	Berehaven	115	9	99½	6 14 0
ditto	81	21½	82½	15 15 0	ditto	95	9½	99	6 15 6
ditto	80	21½	83½	15 18 6	ditto	90	9¾	98	6 18 6
ditto	62	22½	83½	16 5 0	ditto	84	9¾	99½	7 1 6
ditto	26	19	84½	13 15 0	ditto	73	10¾	96½	7 14 6
ditto	127	14	88½	10 2 6	ditto	65	9½	97½	6 15 6
ditto	86	20¾	84½	15 7 0	Burra Burra	66	36½	88	29 11 0
ditto	66	21¾	83½	15 12 6	ditto	64	36½	88½	29 18 0
ditto	63	14	88½	10 2 6	ditto	62	37	86	29 10 6
ditto	24	17½	85½	13 0 6	ditto	49	40	86	32 2 0
Cuba	116	13¾	89½	9 14 0	ditto	39	34	85½	26 15 6
ditto	103	13½	89	9 10 6	ditto	33	39½	85½	31 11 0
ditto	96	12¾	89½	9 3 6	Ballymurtagh	82	5½	113	4 5 0
ditto	86	21½	84½	15 18 6	Hafodyllan	31	5	114	3 9 0
ditto	49	21½	84½	16 2 0	ditto	6	7½	103½	5 5 0
ditto	87	12½	90¾	8 15 0	ditto	1	5½	108½	3 9 0
ditto	84	12½	91½	8 16 0	Aberdovey	22	11	95½	8 7 0
ditto	81	12½	90¾	8 15 0	Davies's Ore	8	2½	132	1 1 0
ditto	64	12½	91	8 15 6	Llanidloes	6	14½	91	10 16 6
ditto	63	21½	84½	15 14 0					

TOTAL PRODUCE.

Cobre	1380	£17623 4 6	Ballymurtagh	82	£346 10 0
Cuba	829	£8905 8 6	Hafodyllan	38	141 18 0
Knockmahon	692	4073 13 0	Aberdovey	22	163 14 0
Berehaven	522	3635 19 6	Davies's Ore	8	8 8 0
Burra Burra	313	9352 14 6	Llanidloes	6	65 11 0

Total tons, 3892.—Amount of money, £44,339 1s. 0d.

COMPANIES BY WHOM THE ORES WERE PURCHASED.

	Tons.	Amount.
Freeman and Co.	42	£297 3 0
P. Grenfell and Sons	642	6862 3 6
Sims, Willyams, and Co.	360	3353 2 6
Vivian and Sons	1160	10942 12 0
Williams, Foster, and Co.	1305	12520 15 6
Schneider and Co.	396	6660 4 6
Smith	186	3703 0 0
Total tons	3892	£44,339 1 6

Copper ore for sale March 2.—Berehaven 113, ditto 97, ditto 94, ditto 45, ditto 33.—Cuba 97, ditto 87, ditto 73, ditto 66, ditto 52.—Cobre 70, ditto 66, ditto 6, ditto 96, ditto 75, ditto 66.—Knockmahon 110, ditto 33, ditto 53.—Holyford 66, ditto 40.—Chili 46, ditto 40.—Ballymurtagh 84.—Kapunda 80.—Glasgow Slag 60.—Vigo Slag 31.—Total quantity of ore to be sold, 1889 tons.

NOTICES TO CORRESPONDENTS.

It will at all times save much trouble, and frequently considerable delay, if communications are simply directed—

To the Editor,
Mining Journal Office,
26, Fleet-street, London.

Also, to avoid trouble, Post-Office Orders should always be made payable to William Salmon Mansell, as acting for the proprietors.

Sir,—Will you favour one of your constant readers with the following information:—Is spelter found in this country?—Does not the ore, called "black-jack," yield spelter? and were not some spelter mines opened some 10 or 12 years since?—If so, in what part of the country? Would you at the same time insert, per next Journal, the total value of all metals raised annually in Great Britain, and what portion comes from iron.—Q. V. D.: *City, Feb.* 10.

[Blende, sulphuret of zinc, vulgo "black-jack," is found abundantly in Cornwall, Derbyshire, and other mining counties; calamine (the white and red oxides of zinc) is also abundant. The reduction of blende to metal has not, however, yet been carried on profitably in England, from the great quantity of coals required to produce a corresponding portion of zinc—it is largely manufactured in Belgium, Germany, &c. We cannot answer the latter question on our own authority, but the following general return may be taken as a close approximation:—Coals, 30,000,000 tons; iron, 1,500,000 tons; copper, 12,000 to 13,000 tons; lead, 20,000 tons; tin, 4000 tons; silver (say), 50,000*l.*; zinc, antimony, arsenic, &c., perhaps, 100,000*l.* The entire mineral produce, including salt, porcelain clay, plumbago, sands for glass, millstones, fullers' earth, &c., cannot be less than 20,000,000*l.* sterling per annum.]

*** We should feel obliged to all pursers, captains, or adventurers, to forward particulars of meetings, &c., of the mines with which they may be connected, on the earliest opportunity, that they may be published in the Journal with as little delay as possible.

Metallurgical Treatment of Ores.—We shall resume the publication of this important series of papers in our next Journal, and continue them regularly until completed.

We regret being compelled to postpone, among other matters, the Lecture of Mr. Hunt, on the History and Practice of Mining in the British Isles—but we shall endeavour to clear off all arrears in a Double Sheet next week.

"B. X."—Our correspondent states, that his means are too limited for the expenses of a patent; we are not aware of any other mode of securing an invention, except by registration, which costs little, but only applies to "shape and design," and is not applicable to every kind of mechanical invention. We recommend our correspondent to apply to Mr. Campin, Patent and Registration Office, corner of Essex-street, Strand.

"An Adventurer in Devonshire Mines"—Mitchell's *Manual of Practical Assaying*, or Budge's *Miners' Guide*.

"W. R." (Launceston).—The insertion of the letter would subject us to an action for libel.

"A Miner" (Leek)—Should address the directors, at the office of the company.

"A Friend to Legitimate Mining" (Cornhill).—We never heard of the scheme, or the parties: our correspondent should certainly satisfy himself, by inquiry, before connecting himself with the undertaking.

We must impress upon our correspondents, the necessity of invariably furnishing us with their names and addresses; not that their communications should, consequently, be noticed, but as an earnest to us of their good faith.

The Mining Journal is published at about Eleven o'clock on Saturday morning, at the office, 26, Fleet-street, and can be obtained, before Twelve, of all news agents, at the Royal Exchange, and other parts of London.

THE MINING JOURNAL

Railway and Commercial Gazette.

LONDON, FEBRUARY 12, 1848.

The improvement in business, generally, which we had the happiness to announce in our last publication, has been well sustained throughout the week just closed. It is not in one direction, or in a single department only, that the favourable change is perceptible. There need no very powerful optics, to discern in every segment of the horizon, the signs and symptoms of a reviving commerce. In the metropolis, it is matter of personal observation and experience; and the accounts from the country concur in, and confirm, the representation. In some of the iron districts, hopes are entertained of orders flowing in; which, we have reason to expect, will be but the setting in of a tide, upon whose bosom will be borne along, activity to mercantile circles, and occupation to the thronging thousands of our labouring population. By a well known law of commerce, the value of all exchangeable commodities is dependant on the proportion which supply bears to demand. When an article is in the market to a greater amount than the market requires, the price immediately descends; and when to a less amount, the specific value of articles, by the same law, runs up. The flow of the seasons is not more certain, more settled, or more uniform, than these tides of the market. For some months past, money has set in upon us with the force and steadiness of a stream. Our banks and bullion offices are full to repletion; so full, in fact, and so far beyond the ordinary demands of commerce, that its price has run down to such a point as to make it accessible to all who have any mercantile consideration to offer for it. No doubt it is satisfactory to the public to know, that such an accumulation of precious metals is safely housed in the cellars of the Bank of England, and other metropolitan banks of deposit. It will be regarded as a sheet-anchor, wherewith the nation may ride out many a commercial gale—as an element giving multitude and keenness to the weapons of war, as well as more assured success to the arts and exercises of peace. This is also our views of its advantages: but is it not also a great power lying asleep with all its fertilising properties, unexercised, unproductive, unimproved—like lamps in sepulchres, emitting a faint radiance unenjoyed by the living or the dead? It ploughs no fields—it plants no vineyards—it steers no fleets to shores, washed by the furthest sea, bearing thither the wrought produce of these lands, and bringing back the raw produce of theirs—it is neither dew, nor rain, nor heat, nor any other influence quickening into activity the commerce of the earth—it is simply a metallic mound—an inert accumulation. The transactions in mining property have, during the week now concluding, partaken of the general improvement. There has been more life in the market—shares taking an upward path, and the holders standing aloof from the importunaters to sell, in the expectation of still improving prices. We think the holders of mining shares in general are quite right; and that they will decidedly find their account, in keeping their commission to sell, for some weeks, at least, out of the pocket-book of the broker.

It will be seen, that the public funds have been somewhat heavy throughout the week; 3 per cent Consols have gone up faulteringly to 89, and then as faulteringly receded a few points lower; they appear to be, for the moment, entangled in a *pous*, which it cannot surmount. It is understood, that they would long since have overslipped that point, but for an expectation, founded on what authority we know not, that Government will require a loan; there is little doubt but that Government, yielding to the almost universal wishes of the nation, will put the southern seaboard of the kingdom in a better state of defence. If the arming, *en flute*, of a score of ships of the line, and twice the number of 1000-horse power steamers, is a leading feature of their plan of defence, we do not doubt but that both Parliament and people will enthusiastically respond to the proposition. A few days will be sufficient to elicit the detailed intentions of her Majesty's Ministers, as to this and to other most important branches of the public service.

The question, whether the small remaining duty on foreign copper ores shall be retained or not, will now shortly be brought under the consideration of the Legislature; and although of but small importance, either as affording any benefit to the miner, or as a matter of national revenue, being only about 50,000*l.* per ann., it is made a stalking horse, by the supporters of this ideal protection in Cornwall, who are making the most strenuous exertions to give the Members of Parliament for Cornwall a sort of protectionist education, to enable them to act their parts with vigour before the schoolmaster in the House of Commons. In our last Number, we gave a full report of the meeting at Truro, held last week, to consider the policy of appointing a deputation to assist, by statistical information, and every means in their power, the county Members in their endeavours to support the maintenance of the present duty on foreign copper ore. The meeting itself was by no means important, except as in showing the interest attributed to this merely nominal, yet injurious duty, by a few large landed proprietors in the county, and the almost total apathy with which the question is viewed by the great body of wealthy adventurers who have absolutely fortunes invested in the copper mines of Cornwall, but who did not feel it worth their time to attend a meeting for such a purpose as that set forth. The majority of men of business in Cornwall, and out-adventurers, know, that so far from the abolition of the duty being injurious to the general mining interests of the county, it would ultimately prove a blessing; and that the smallness of the remaining duty, hardly paying the cost of its collection, is, from its very diminutiveness, totally unprotective to Cornish mining and miners, while it sits a heavy incubus on the shoulders of commerce, causes a great depression in the employment of British freights, and paralyses industry, instead of protecting it. Mr. Treffry, in a communication addressed to the *Royal Cornwall Gazette*, accuses the Mining Journal with being "converted disciples to the very measure which for years it most bitterly denounced as ruinous to the British miner." We believe this gentleman to be most conscientious in his opposition to a repeal of the tax, and that he believes its continuance to be for the salvation of the mining industry of Cornwall; but we must be allowed to observe, that in the last few years a perfect revolution has gradually been taking place in our internal policy, our mode of taxation, and our commercial treaties with the four quarters of the globe; prohibitory duties have been repealed, tariffs revised and altered, a more free and unbounded exchange of production taking place with the whole civilised world: this, then, is not the time for the continuance of the trifling remains of a duty originally levied under totally different circumstances, but which is no longer tenable, and the repeal of which will but assimilate the industrial resources of Cornwall to every other staple produce of Great Britain, and revive and animate its industry. Sure we are the time is fast approaching when taxes will no longer be imposed under the fictitious idea of "protection for native industry," but solely as a measure of revenue and finance. In another column we publish a communication from Mr. W. Francis, which we think places the matter in a truer and fairer light than any which we have yet perused: we are no advocates for the smelting monopoly, and should be most happy to see a "Miners' Smelting Company" established. While the majority of the supporters of the continuance of the duty indulge themselves in the most complex and ridiculous *arguments in figures*, generally most egregiously erroneous, Mr. Francis merely shows, in a manner undeniable, the exact amount of duty on ores of various produce, and carries out his subject in unanswerable arguments. We also call our readers' attention to a communication in this day's columns, headed "Smelters *v.* Miners," and shall ourselves return to the subject on the earliest opportunity.

[FROM A CORRESPONDENT.]

The appointment of a deputation, to assist the county members in the elucidation of the subordinate class of particulars connected with the importation of foreign copper ores, may be an expedient not without its convenience and utility—in short, we see nothing whatever to complain, of either in the composition or the objects of the meeting of mining proprietors, recently held at Truro. It is true, that Sir Charles Lemon endeavoured to assign a reason for the fears entertained, that the free traders will this year move in Parliament for the remission of the remaining duties on foreign ores. To our minds, the reason so called, when looked into a little, is a deal like no reason at all. Sir Charles has seen, it appears, two memorials to Government for the cancelling of the existing duty. Very true, but if the mining interest of Cornwall had been much alive to the importance of the measure of protection now enjoyed, two memorials, also from that county, would, by this time, have been in the hands of Government, praying the *continuance* of the tariff law as to foreign ores; but, had they been there, and their prayer was ever so urgent, or their reasons ever so plausible, the deduction from such a premisis, that the Protectionists would this year bring their case to the notice of Parliament, would be a conclusion altogether gratuitous and unauthorised. Of this reasoning, therefore, we do a little complain; because it misleads, or is calculated to mislead, the parties interested, as to the quarter in which the difficulties of their case are likely to spring up.

Memorials, indeed, are often blown into the Government offices from all the winds of heaven; but the circumstance of their alighting on the windows in Downing-street, is the flimsiest of all reasons for believing, that Parliament will ever see, or Government ever sanction, them. If this is a probable representation of the actual prospects of the case, then is the alarm founded on the presentation of these documents, in the fullest sense, premature; and the appointment of the deputation, as well as the expense of its maintenance, uncalled and superfluous. The time, however, as we have already said, is anything but favourable for the removal of these imposts; and if the members of the deputation, by their resources, as men of business, and their familiarity with details, can strengthen the hands of the county Members, as against the manufacturers, we shall, with the Protectionists, rejoice at their appointment. Let another harvest, with its golden treasure, roll in upon us, as the ocean on the shore—let the tide of trade fill up, and enrich once more its parched and hollow channels, before we venture to lower the resources of the public Exchequer, in the least, of the fountains at which it feeds. This, we have reason to be tolerably confident, is the purpose and determination of the Queen's Government. Resting on this conviction, we shall wait to see whether the earnestness and activity of those who have placed themselves at the poles of the argument, will be able, in either way, to alter the equilibrium now subsisting—whether, in fact, committees, or deputations, or even individual Members of Parliament, will be able to disturb, for one moment, the mind and march of her Majesty's administration, with respect to this particular object.

The ample intelligence in this day's Journal, respecting the great progress of mining industry in the colony of South Australia, will prove well worthy attentive perusal: while, for a moment only, we wish to call the attention of our mining friends to the singular productiveness of the Burra Burra Mines, in South Australia. It appears that, in about 18 months, these mines have yielded the extraordinary amount of 9841 tons of rich copper ore—so rich, that its total value amounted to 150,000*l.* The original purchase money of the mines, together with the costs of working, from September, 1845, to March, 1847—the year and a half in question—is something under 75,000*l.*, which has been wholly repaid to the shareholders, in two dividends, of 50 per cent. each; and the directors are about to declare another dividend of 100 per cent. We make no comment whatever on this extraordinary statement. We suppose it to be without a parallel in the whole history of mining successes. A large part of the ore has arrived at Swansea for smelting, another portion is on its way, and a remnant of some 1600 tons will be forwarded to this country, or America, with as little delay as possible. When things are at the worst, we are accustomed to say, there must soon be an improvement; and it may be as safely said, when undertakings have attained the maximum altitude of their success, they are likely to take up a less elevated station shortly. Of course, shares in these mines must stand at a nominal value. No one will choose to sell—no one will dare to buy; but if shares in this highly-fortunate concern are really in the market, we should whisper *caution* into the ears of purchasers, notwithstanding the attractive and tempting character of these results; for it is scarcely conceivable that even South Australia can continue to pour such a stream of remunerative benefits into the lap of the British adventurer as are in this case surprisingly exhibited.

PROGRESS OF FRENCH MINING INDUSTRY.

[FROM OUR PARIS CORRESPONDENT.]

A company has just been formed, with a capital of 16,000*l.*, in 800 shares, for working the *Mine de Schiste de Mouthier*, in the department of the Doubs, said to present a superficial extent of 4 kilometres 89 hectares. The mine, it appears, was conceded by royal ordinance of the 8th of May last. The person to whom the concession was made is to have 6000*l.* of shares—*i. e.*, half the capital for making it over to the company, of which he is to be the managing director. The number of mines of "schiste," which were worked in all France in 1845, was only 11, and the total value of their products did not much exceed 30,000*l.*

The director of the Customs Department has issued a circular, dated the 3d, ordering that coke, like coal, shall be exempted from the necessity of being weighed when imported. Instead of the weighing, vessels, importing coke, are not to be visited, when they declare their contents to be at the rate of 1000 kilogrammes, or one French ton, per ton in the measurement of the vessel. This new measure is a very useful one, as it will save an immensity of trouble, both to importers and Custom-house officers.

The Navy Board has put forth announcements of its intention to receive another batch of contracts. Among the articles specified are the following:—At Toulon, the 11th of March, 225 tons of cast-iron, of French manufacture, and 75 tons of English—the iron to be of the description, called by the French *fonte noire*; same day, at the same port, 100 tons of lead, in pigs; same day, at Brest, 257 tons of copper; 29th of Feb., 3000 tons of cast-iron (*grise*), at Nevers.

A Royal ordinance, dated the 2d, allows zinc to be imported into France free of duty, to be rolled, provided it be destined for re-exportation. The effect of this measure will, undoubtedly, be to increase the already extensive imports from Belgium.

Though the Chamber has now been sitting several weeks, it has not yet got through the debate on the address. The time that is lost in wearying political discussions is really shameful. How much better would it be to deal with really practical measures—the revision of the tariff, for example—a measure earnestly called for by different branches of manufacture and industry, and having a decided influence on the welfare of the whole people. There is, it is true, a bill now before the Chamber, which makes some improvement in the tariff, but it is nothing like so extensive as it ought to be. Such as it is, however, it is expected, with the greatest impatience, by those whose interests it increases, and dreaded with great terror by those whose interests it lessens. In the former class, we may count shipbuilders, and all those who consume coal; in the latter, the ironmasters and coalowners. Notwithstanding all the indisposition of the Chamber to deal with such matters, it cannot be long before the new bill comes under discussion; it has already been shamefully delayed from the last session.

Great dullness continues to prevail in commercial affairs generally, and in mining matters in particular. Still many transactions in mining shares have lately taken place on the Bourse, some of them being of a certain importance.

It is really surprising at times, to see the extraordinary ignorance which exists in this country, even among practical people, on subjects on which they ought to be peculiarly well informed. For example, a gentleman, writing on the coal question, in one of the principal journals of this city, coolly lays down, as an indisputable fact, that, even should the present consumption of native coal be doubled in France, the single basin of the Loire could supply it for upwards of a *thousand years!* Whereas, it clearly appears, from an able report on the Loire basin, by M. Migneron, one of the Government mining engineers, that in doubling the consumption, the Loire basin could only make the supply for a period of 44 years *certain—probably* for 58 years—*possibly* for 83. Other basins are not in such a favourable position as that of the Loire; it is, therefore, by no means improbable, that, supposing the consumption of coal to go on incessantly increasing, as it no doubt will do, and supposing no unexpected, unhoped-for discovery of new coal-fields to take place, many of the present generation may live to see France without any native coal at all!

At St. Dizier, on the 13th, iron, *roche*, from wood, was 430 fr. to 440 fr.; the *fers battus*, from coal, for Paris, 340 fr.; and for the provinces, 350 fr.; iron *laminé*, 340 fr.; cast-iron (no transactions), 145 fr.

Paris, Wednesday.

Belgium.—The Belgian journals are beginning to sound the alarm, *a propos*, of the importation of English coal into France, and of the articles and calculations which have appeared in the *Mining Journal* on the subject. The *Belgique Industrielle* is particularly energetic in warning the Belgian coalowners of the terrible competition with which England threatens them. It quotes largely from the *Mining Journal*, for the purpose of showing that English coal is greatly preferred in France to either Belgian or French; and now, that so many railways are open, there is no earthly reason why it should not make its way to Paris, and even drive the Belgian and French coal out of the departments of which they have hitherto held undisputed possession. According to your contemporary, things are looking very gloomy, indeed, for the Belgians; for it frankly admits, that British coal is better than theirs, and will, no doubt, sooner or later, drive theirs out of the market altogether. The *Belgique Industrielle* calls on the Belgian coalowners to "devise means for meeting the storm which is raging in their commercial horizon, by this competition of Great Britain." But it does not indicate what, in its opinion, those means ought to be; and it is not likely that, even should the coalowners meet in solemn conclave, they could concoct any. The truth is, that, provided the English can manage to sell their coal at something like the same price as the Belgians, nothing can prevent the latter from losing their ground.

The Vieille Montagne Company employs about 1500 workmen; and in 1846, it made use of 35,000 tons of coal, 36,500 tons of cast-iron, 40,000 tons of iron, and produced 9000 tons of zinc. In 1847, its consumption and production were much greater.

Some little time ago I mentioned, that Prussia had suddenly re-established a rather heavy duty on the importation of Belgian coal. Your readers may not be aware, but such, nevertheless, is the fact, that this measure is entirely to be ascribed to the development of metallurgic industry in Prussia. Three or four years ago, for example, Prussia employed all her efforts to obtain possession of Holland, as a market for her exported coal; her production of coal being so great that she was obliged to seek foreign *debouchés*. To drive the Belgians out of the Dutch market, the Prussian Government spared no sacrifices—it even went so far as to give up navigation duties, rent of mines, &c., so as to enable the coal exporters to send their products to Holland on such favourable terms as should make the import duties into that kingdom not felt. The consequence of this was, that the Prussians undersold the Belgians; and as, besides, their coal was superior to the Belgians, they nearly succeeded in driving the Belgians out of the Dutch market altogether. Subsequently, however, metallurgic establishments in the Rhenish provinces became established on a very extensive scale; and these absorbed so much coal, that the Prussian coalowners, finding a market nearer home, neglected that of Holland. But, by the opening of railways, it so happened, that these establishments were able to obtain Belgian coal even cheaper than Prussian. Hence, the Prussians found themselves in, what the Yankees call, "a fix,"—their Dutch market having been abandoned, and the railways having cut them out of their own native market.

Representations of this deplorable state of affairs having been made to the Prussian Government, it determined, at least, to secure its own people their own Prussian market. And thus it was, that, to effect this object, it re-established the duty on the import of Belgian coal, thereby compelling the metallurgic establishments of Prussia to use Prussian coal.

I have already informed you, in previous letters, that this measure of the Prussian Government was one of very great gravity, indeed, to the Belgian coal mines. To the Belgian railways, also, it has caused a serious loss, by depriving them of one of their most important branches of traffic.

In connection with this subject, it may not be out of place to mention that the Prussians have of late years given an extraordinary development to the working of their coal-pits. Not long since no one would have believed that so much coal existed in all Prussia, as has actually been dug out of the bowels of the earth; and yet it is now a perfectly well-established fact, that the coal deposits of Prussia are extraordinarily great, and that, in all earthly probability, not a tithe of them has yet been discovered. The Prussians, moreover, seem to be perfectly alive to the importance of working their coal-pits; for no sooner is a discovery of a coal mine made, than a large amount of capital is immediately subscribed to work it. One of the principal coal basins of Prussia at present worked, is that of Essen, at seven leagues from the Rhine. Its coal is what the Belgians and French designate as *gras* of the first quality. This coal is sent to the Rhenish provinces, Frankfort, Holland, and even finds its way

beyond the French frontier, to Strasburg for instance. Within the last two or three years an immense extension has been given to the working of this coal-field. The coal is sent by the Ruhr to the Rhine, and the facility of railway communication causes it to be extensively consumed. Another basin is that of Eischweilen, the production of which is not very considerable. Its coal is sent to the Rhenish provinces, and to the vicinity of Aix-la-Chapelle, but is not sufficient to supply the metallurgic establishments; the coal, however, is good. The principal basin is, that of Saarbruck—the coal of which is of excellent quality, especially for steam-vessels. It is not so well adapted for metallurgic works. Nevertheless, it is most extensively used in navigation and domestic purposes in all the country comprised between Mentz and Cologne. It even finds its way to France; and, as was stated in your Paris correspondence some time back, it is confidently expected, that the opening of the Strasburg Railway and its embranchments, and the formation of some new canals which have long been talked of, added to the extension of others, will lead to its being extensively used in France, and, in all probability to its being selected to supply the iron-works of the Haute Marne, which are the most numerous and important of all France.

The unfortunate Belgians, though terribly mortified at losing the Prussian market, are still more alarmed at the prospect of losing the French market—a prospect held out to them, as they fancy, by the Parisian correspondence of the *Mining Journal*. That market is, after all, the most important they possess, or are ever likely to possess. The figures forwarded to you last week, show that the exports of coal to France are truly immense; but, now that the *Mining Journal* has advised its countrymen to dispute it with the Belgians, they are in utter dismay, and their principal cry has become:—"Those cursed English are about to ruin those of our coal-fields which supply France!"

I ought to have observed, when speaking of the Prussian coal-fields, that many Englishmen have already advanced a considerable amount of capital in them; and I am given to understand, that the stake of our countrymen in these coal districts is very likely to be greatly increased, before many months shall have elapsed.

The shareholders of the English and Belgian Company of the Mines of the Rhine, at Dusseldorf, are informed that the interest on the shares, up to 31st Dec., is now payable.

The Prussian budget contains an item of receipts from mines, iron-works, salt works, and porcelain manufactories, belonging to the State, of 1,167,218 thalers.

In Bohemia, it is stated that there are 50 furnaces in operation, which yield 470,000 German quintals of cast-iron, of the value of about 2,000,000 thalers. This is much less than the production of the provinces of Silesia, the Rhine, and Westphalia. The iron-works of the Prince de Diefrichstein, in Southern Bohemia, are the most important, and are managed on the most enlightened principles.

A meeting of the shareholders of the coal-pits of Bonnet et Veine à Mouches sous Quarengon, is called for the 12th of March.

STATE OF THE IRON TRADE—COLLIERS' STRIKE.—The iron trade, we are sorry to find, still remains in a very spiritless state; and the misguided colliers, in many of the districts of South Staffordshire, prefer idling about, starving themselves and families, than submit to a trifling reduction of wages, to which steps their employers have been compelled to resort from the great fall in the market price of iron; notwithstanding, from the present low price of provisions, the offered wages are equal to double what the men generally received four or five years since. The ironmasters, as a body, are determined not to yield, and the men at present exhibit the same determination, but they must be severe sufferers in the sequel. Indeed, few of the large houses feel the least anxiety about resuming their works until brisker times; for, were the men at once all to yield, the demand is so extremely limited, that they would not be half employed. The failure of Messrs. Jevons, Sons, and Co., of Liverpool, is said to have shaken two or three houses in South Staffordshire very seriously. We give the following remarks on the subject from a local paper:—"The British Iron Company's men have now been out of work since Christmas. The rate of wages being quite out of proportion to the profits of trade, the company were compelled to give notice to their workpeople of a proportionate reduction of wages. Their earnings are now about double what they were five years ago, while the prices of provisions are moderate. Under these circumstances, the men can afford to submit to the terms offered. They certainly cannot expect the sympathy and support of the public, in this struggle against their employers, when it is known that they can earn from 3s. to 5s. a day, and many 6s., if they were so disposed. We hear that the coalmasters in the Ruabon district, finding no advantage in working at present prices, have resolved to give notice of a general reduction of wages, to take effect in the course of next week. The Brymbo Company have already done so, and the men have met the reduction in a proper spirit. We trust that the colliers, generally, will have the good sense to agree to the proposed alteration. They have enjoyed an extravagant rate of wages during several prosperous years, and must see, that in the present depressed state of mineral property, such wages cannot be maintained."

COAL IN CHILI.—We have, on various occasions, alluded to the mineral resources of Chili, which stand pre-eminent among the republics of South America. Lately, several extensive coal-fields have been discovered between Valparaiso and Santiago, but one in particular, belonging to an English firm, a short distance from the port of Valparaiso, is likely to prove a most valuable speculation, as it is being worked, and the coal equal to that of Newcastle, which can be delivered at the rate of 4s. per ton, whilst but a short time ago none could be obtained at a less price than 2*l.* to 2*l.* 10s. Several miners have arrived out there from the north of England and from Australia, at high wages; and as the parties who have got the property and concessions, are chiefly British, and strongly patronised by the Government, there is little doubt that these seams will be worked on a large scale, as native labourers (*peones*) may be obtained at a very low rate. To the progress of steam navigation in the Pacific, the facility of obtaining coal in Chili will be a most important advantage; but to mining adventurers it will be the means of greatly developing her mineral resources, by the establishing of steam-engines, furnaces, and smelting-houses, on the spot, instead of sending the ore to Europe to be reduced; roads are being cut in every direction, and water conveyance will be easy of access in the interior.

BITUMINOUS COAL IN AMERICA.—It is said that a large deposit of bituminous coal has been discovered at Burlington, Lawrence county, Ohio, which promises an abundant supply—equal, if not superior, to the Pittsburgh or Pomeroy coal—and is a great addition to the vast resources of that state.

COAL MINING IN NEW SOUTH WALES.—The papers last received from the colony, to the 11th September, contain one highly gratifying piece of intelligence—that the monopoly in the working of coal had been abolished. On Tuesday, the 17th August, a message from the governor was sent to the Legislative Council, to the effect that, perceiving they had appointed a committee to investigate the privileges granted to the Australian Agricultural Company on their undertaking to work coal at Newcastle, his excellency desired to inform them, that an arrangement had been made by the directors of the company with the Secretary of State for the Colonies, by which all privileges, both on the part of the company and the Government, were to be given up, without entailing any charge on the colonial funds. The announcement was received with considerable cheering.

METALLURGICAL INDUSTRY OF BOHEMIA.—It appears, by a paragraph in the *Prussian Gazette*, that metallurgical industry has, within the last few years, made considerable progress in Bohemia. Although at present there are not more than 50 establishments in operation, these have produced 470,000 quintals of metal in the course of one year, valued at 2,000,000 thalers (280,000*l.*) This quantity, it is stated, is very little below the entire production of the production of the provinces of Silesia, the Rhine, and Westphalia, where strenuous endeavours have been made to push this branch of business. The mineral resources of Bohemia are described to be most extensive; and, according to the statement quoted, have scarcely yet been properly developed.

THE EXPLOSION OF THE "CRICKET."—In the House of Commons, last night, Mr. Muntz asked the right hon. Baronet, the Secretary for the Home Department, whether, in consequence of the explosion of the *Cricket*, it was the intention of Government to take any steps in respect of the valves of steamers plying on the Thames?—Mr. Labouchere said, perhaps the hon. Member was not aware that Government already had control over these boats. All vessels that carried passengers were required to undergo an examination by an officer appointed for that purpose by the Board of Trade.

THE "CRICKET" STEAM-BOAT EXPLOSION—REDGRAVE *v.* SMITH.—This was an inquiry in the Sheriffs' Court (before Mr. Under Sheriff Burchell), to assess damages, for injuries sustained by the plaintiff (who sued by his father, as next friend), occasioned by the bursting of the boiler of the *Cricket* on the Thames, on the 27th of August last. The defendant had suffered judgment to go by default, and evidence having been given, to show that the valves had been tied down; that Smith had been warned of the dangers which existed from this practice, his refusal to interfere; and from the medical man, who stated it was probable the youth was injured for life, the jury found a verdict for the plaintiff—damages 200*l.* Two other actions by the parents were rettled by consent for 50*l.* each.

Original Correspondence.

PROFESSOR ANSTED ON THE SILVER MINES OF THE BLACK FOREST IN GERMANY.

SIR,—A remark which I perceive in your report of one of my friend Mr. Hunt's admirable lectures, at the London Institution, induces me to take this opportunity of doing what I have long intended—I mean offering some remarks on the more scientific and generally interesting facts and views made known to me in the course of my professional occupations connected with mines. It frequently happens that, without the smallest breach of confidence, very useful general information may be communicated by the observant mine surveyor; and my position having often led me to foreign mining districts, this information is the more likely to be new to most of your readers. The remark I allude to is, that "silver is never found alone in quantities sufficient to be sought by independent mining operations." This, although in most cases true, is partly contradicted in the case of some mines which have lately come under my examination, and which present highly interesting peculiarities. The mines to which I allude are some of those belonging to the "*Kinzigthal Mining Association*," which has been in operation about eight or ten months. The association has the right of mining over an extensive district on the right bank of the Rhine, in the Black Forest, nearly opposite the city of Strasburg, and not far from the mining district of the Vosges Mountains, in France—I mention the latter as affording something like similar geological conditions in many respects. The valley of the Kinzig, and the little side valleys opening into it, have been long known and worked for the following metals:—silver, cobalt, bismuth, antimony, lead (argentiferous galena), and copper. A very large number of small mines have been opened in former times with various success; but scarcely anything has been done on a large scale in the present century, till the mining rights came into the hands of the English company already alluded to. I have been employed by this company to examine the works and suggest plans of working, and have thus had an opportunity of investigating the main facts of the district with regard to the mines. In the present communication, however, I do not propose to allude to the ores of any metal but silver, with respect to which I do not hesitate to say, that one portion of the district is almost more remarkable than any other known locality. The country, or prevailing rock, in this district, is granite—forming a multitude of pyramidal masses rather than hills, and intersected by numerous valleys, through which streams make their way. Gneiss also exists in the district, and appears to be stratified with the granite. The whole is occasionally covered with red sandstone, which the metalliferous lodes do not traverse. The lodes are of two main directions, with occasional contras—the silver, cobalt, and antimony, being in north and south lodes on the southern and eastern parts of the district; and the lead and copper both occurring in east and west lodes, and often together. The veinstone is almost invariably heavy spar. Throughout the district, as far as is yet known, the ores are chiefly distributed in pockets, nests, or bellies; and there are no instances recorded of anything like courses of ore. It must be observed, however, that the lodes have never been proved in the depth, although the absence of water renders this a particularly easy and inexpensive experiment. As far as can be told from the general character of the richer and larger pockets now worked out, these do not appear to have ever offered inducements for deep sinkings; and there seems to be a good deal of superstition and local prejudice on the subject of mining operations on a large scale.

After this somewhat long preface, which, however, was necessary to elucidate the matter, I now turn to the so-called *Silberberg*, or silver mountain, of Wittichen—the chief object of my present letter. This hill covers an area of about one-third of a square mile; and there is a kind of ridge forming the highest part, running north-east and south-west, or nearly so. Several lodes and branches cross this hill, bearing north and south; and some of them, two more especially, have proved singularly rich in native silver in places where the lode has expanded into pockets, nearly under the ridge of the hill. In one or two places here, I noticed heaves, but not of great extent; and there is no evidence of their effect on the richness of the lode.

Large excavations mark the interest felt by the old people in these spots; and the hardness of the granite has been no obstacle to the operations having been carried on as long as there seemed a chance of success. Some time ago, a company, working very languidly in this hill, managed, however, to hit upon what appears to be a branch, parallel to one of those main lodes which has so greatly expanded; and in this branch, at a similar spot, under the ridge, ore was again met with. Soon afterwards, and without any very great value being attributed to the discovery, the local company was bought up by the English company, and it devolved upon me to examine the workings at the spot. It soon appeared that the quantity of ore that had been raised at the place in question, although comparatively small in quantity, was of very unusual richness and value. It was regarded as partly silver, and partly cobalt; but is, in fact, almost entirely silver ore. The branch, like the lode, is irregular; its thickness, when metalliferous, small, varying from 4 to 6 or 8 in.—the veinstone, as usual, sulphate of barytes; and the ore, chiefly native silver, in crystals, snags, and disseminated; sulphuret of silver, carbonate of silver (?), together with similar ores mixed with cobalt, arsenic, nickel, and some other substances, are also found in small quantity.

The ore is not, however, by any means confined to the lode. Native silver is widely and extensively—one might say, abundantly—disseminated in the neighbouring granite to some distance; and thus there is difficulty in learning what practical limit must be set to the bringing out of the mine the rubbish formed by blasting. The richness of these ores is almost beyond belief. Of some few hundred-weights forwarded to England, two samples, assayed by Messrs. Johnson, yielded respectively 2360 and 5870 ozs. of silver to the ton; and specimens, roughly knocked out of a single lump, afforded, by careful picking, 6 lbs. of native silver, whose yield, when assayed, was 91·7 per cent. of silver—say 91 per cent. of fine silver. The other ores, when carefully picked, yield 14 per cent. of silver; and of such ores several hundred weights were raised by two men, the whole number employed at that time in the mine, in the course of a very few months. I think I am justified in saying, that lodes yielding thus, are amongst the most remarkable—if not the most remarkable for silver—that have ever been described. Ores are still being raised; and there is every probability that, for months to come, this small pocket will continue to yield ores of this kind—and this is one of the comparatively minute expansions occurring in a branch! There are many points bearing on the practical working of mines suggested by the peculiarities of this district; and these I may, perhaps, speak of in a future communication, should you think this worthy of a place in your columns. D. T. ANSTED, Consulting Mining Engineer.

Gloucester-road, Hyde-park, Feb. 7.

MINING IN THE ISLE OF MAN.

SIR,—The mines worked by the Isle of Man Mining Company were undertaken, about 25 years ago, by Mr. Knott, a spirited and worthy miner, under a lease from the Crown, at $\frac{1}{20}$th royalty, and were afterwards divided into 14 shares—not having more than six or seven adventurers, all theoretical, business, and scientific men, who, with but few exceptions, have continued working the mines for the period above named, during which the returns in lead and silver may be estimated at 400,000*l.*, paying the Crown, whose mineral rights it is, 40,000*l.*, and the adventurers about 50,000*l.* profit; paying in the island for labour, 250,000*l.*; to merchants and others in the island, 50,000*l.*; and for materials, machinery, &c., from Liverpool and other places, 10,000*l.* The amount paid from these mines has been the soul and existence of that part of the island; and it is to be hoped, that the next 20 or 30 years may be equally beneficial to the country and to the adventurers; and, if my informant is correct, it will, in future, be doubly so to the lord, or the Crown. As I understood it, on application to the Crown for a renewal of the lease, the agents for the Crown land made a condition, that a great part of the ground held in lease by the present company should be given up, which, according to my notion of the extent, must embrace nearly 100 square miles, or 64,000 acres.

That the extent of such a lease, 30 years ago, with parties ignorant of its mineral wealth, might, or might not, have been judicious, I am not disposed to say more about at present; but merely may state, that I commend the Crown agents, in their present proposition, to divide this extent into several parts, and at considerably reduced royalty, giving other companies an opportunity of making trials in other parts of the island. Although many parts may be worked, and much capital swallowed up in ground, that a practical and scientific miner would pronounce as unworthy of capital and trial, still it will give mining companies a fair chance of speculating in their own way; and justice will, in such case, be done to the Crown, to the island, to the present company, and to mine adventurers; and in this way its mineral sources will be fully developed. I am an advocate for a liberal extent of ground in all grants; still, in this instance, there is ground for several companies. It should be here observed, that every company should have such given as would be fair to compel it to make trials; and all such ground as might appear likely any company might drain by its machinery, should be a part of its grant, and proper clauses for its fair and effectual working should be agreed to; but that a company, at taking a lease, should be compelled to deposit any given sum exceeding that necessary for a fair trial, which should be named by the lessor's agent, appears preposterous—and that only paid as it might be required to carry out work, which should be specified between lessor and lessee. Leases, generally speaking, in this respect are loosely drawn; and it would be next to impossible to provide clauses in the lease to meet all emergencies—therefore, a deviation in them should only be made according to circumstances, and by the full concurrence of the lord's agent, who, it is equally necessary, should be a miner and scientific man, as much so as the mine manager. I have scarcely met in my travels a mining district out of Cornwall where there is not the strongest proofs of the want of good understanding between lessee and lessor—principally arising from the want of proper knowledge of mining in lord's agents, or in the lords themselves—the lords and their agents fancying their interest to be best studied, by putting on the screw, and taking the greatest amount of toll, or royalty, from the lessee. Never could there be greater injustice done to themselves, or a greater mistake made than this. Cardiganshire, Flintshire, and Denbighshire, groan under such errors: the true spirit of mining, with its capital, being, in a great measure, withdrawn from the two latter counties—whilst it only exists in the former from a lucky hit or two—*i. e.*, Lisburne and Goginan Mines; whilst ten times the number of miners might be employed in each county, provided fairness, and a proper understanding between lord and adventurer, could be restored, which, I much fear, will never be done till scientific miners be employed by lords as their agents for mining, or some Act of Parliament be passed, appointing a commission to regulate such matters. But to the point. The Isle of Man, containing about 300 square miles, has all the rocks and stratification found in the best mining district of the kingdom—granite, clay-slate, channels of slate, elvans, ironstone, porphyry, trap and other rocks, unnecessary here to describe, with east and west lodes, cross-courses, slides, &c., in places strongly mineralised; taken altogether, giving great facility to the deposits of such minerals into the veins as the country contain. The great run of lodes is on the north side of the granite, and close to it, running from east to west, and partially worked on, for nearly four miles in length. On the cross and oblique veins, running from the granite northward through them, the mines yielding the returns before made are the following:—Beckwith's, to the west, has been worked 120 fms. deep; and, in the upper parts of the mine, 200 fms. in length, and 150 fms. long, at 80 fms. deep; this has been a rich mine. Crosse's Mine, about a mile to the east, has been worked 60 fms. deep, and 100 fms. in length. Dixon's Mine, half a mile to the east, has been worked 100 fms. long, and 30 fms. deep. Old Foxdale, three-fourths of a mile to the east, has been worked 100 fms. in length, and 70 fms. deep. The Taraghar's Mine, about half a mile to the east, has been worked 200 fms. long, and 30 fms. deep.

These are the mines from which all the profitable returns have been made. The ground still unexplored, between each mine, holds out great promise; and with the royalty, as now fixed, of $\frac{1}{20}$th, although the best part of the lodes may be considered, by some, as taken away, still there can be little doubt, if any, of the Crown receiving double the royalty in the next 25 years, that has been paid in a similar past period. The Laxey Mine, seven miles north-east from Douglas, has been a productive one for 20 years past, yielding lead rich in silver, worked by the Laxey Mining Company, on the junction of two lodes westward, 100 fms. deep, separating from each other, on going east, about 30°; forming a junction to the west. The first junction, the eastern lode, turned the western one 8 or 10 fms. in its direction; then the direction of the western one took its course, carrying with it the eastern one 8 or 10 fms.; again, about the same length, on the direction of the eastern one; so continuing together for more than 150 fms. in length. Curious as it may appear, all the branches of ore are found when the lodes run in the direction of the western one; while the direction of the eastern one are all blanks. Therefore, leaving pieces of dead ground, of similar length to the orey ground.

Many thanks to the "Lover of Fair Play," for his letter, exposing mines, so-called, in Scotland: such men as the writer of the first letter, calling forth the reply from the "Lover of Fair Play," could never succeed in deceiving the public, but in connection with others, pretending to be adventurers, who, in reality, are a mere set of jobbers, and have no other object in view than the sale of shares, regardless of the true value of the mine, which they know to be worthless; hence, the easily-gulled and unwary. I should only rejoice to know that every fair adventurer, throughout the kingdom, was at this moment reading my remarks on such mode of proceeding; and I hope soon to see the day when all such practices will be scouted by all honest miners, which it is their bounden duty to do. It is by the exposure of such conduct alone, that the groundwork for fair and proper mining, as far as it goes, can be restored. Bad practices in mining give an unfair monopoly to only a few, who are better known to capitalists, operating much against the general good of lords, adventurers, and the country at large.—A TRAVELLER: *Feb.* 9.

THE COPPER TRADE.

SIR,—Believing that many of your leading men in Cornwall labour under a great misconception, as to the cause of the terrible depression under which our copper mines are suffering, I have been induced this week to address a letter to Sir Charles Lemon, with the view of calling the attention of the mining interest generally to the evil which really afflicts us, and the remedy which I propose for it. I do not doubt but that many parts of the letter in question would be interesting to a large portion of the readers of the *Mining Journal*, and I shall accordingly feel obliged by your giving it insertion in that paper, together with any remarks which you may conceive the subject demands. It would be most important to impress upon the attention of the wealthy portion of the shareholders in the home and foreign mines, the necessity of uniting their strength, in order to accomplish the object set forth in my letter; and, as an opportunity such as the present for going into the copper trade is not likely again to offer, immediate action should be strongly urged. The retirement of the English Copper Company from the copper trade, within a very short period, will, in all probability, place a most complete and ample premises at the command of any new company, on terms exceedingly advantageous. I offer these remarks for your consideration, feeling assured the whole subject, in your hands, will be done full justice to.

White Hall, Truro, Feb. 5. WM. FRANCIS.

THE COPPER TRADE.

TO SIR CHARLES LEMON, BART., M.P.

SIR,—If an apology for this letter be necessary, I am prepared with one, which, I believe, will be deemed ample by a very considerable number of the copper miners of the county. It will be found in the fact, that such measures as are at all likely to benefit the copper mines, were in no way referred to, at the meeting held at Truro, on the 21st ult., and that the information which it is desirable that you and our other representatives in Parliament should be in possession of, is not likely to reach you through the deputation then appointed. I am, at the same time, deeply sensible of the responsibility I incur in taking upon myself the authorship of a communication of this kind, as I well know there are among the copper miners those who are in all respects better qualified to discharge this important duty. I have the best reason to know, from a tolerably extensive intercourse with the miners throughout Cornwall, that your efforts in particular, as well as those of the noble lord who presided over the meeting at Truro, and of many others who have on different occasions advocated the cause of protection to our mines, are fully appreciated, and I am glad to have this opportunity of making that acknowledgment on their behalf.

The course of events which has marked the progress of the copper trade in this country for many years past, has been narrowly watched, and a conviction has been rapidly gaining ground in men's minds, that the causes of those fluctuations, both in the prices obtained for the ores by the miners, and for the metal by the smelters, have been left untouched in all the arguments which have been employed by those who contend for protection on the one side, and those who are opposed to it, on the other. No useful purpose would be answered by my doing more now than to endeavour to place the copper question before you, in its shortest and most simple form; I will, therefore, adopt the disclaimer, put forth by most of the gentlemen who spoke at the meeting on the 21st ult., and refrain from considering the question in its free trade bearing, though I confess myself at a loss to discover how the discussion of it, either in Parliament or with the Ministers, is to avoid all reference to the great principle upon which the entire trade of the country at present hinges.

You must, as I conceive, be prepared to show that the protection afforded to our copper mines by the present scale of duties on the foreign ores imported into this country, is such as to justify the Government in making a special exception in favour of this particular measure; and in order to do this, it follows that you must be prepared with proof of the injury which would be inflicted on the copper mines by the removal of those duties. I will very briefly shew that the protection, so called, which we derive from the imposition of the duties in question, is a delusion, and I fear a snare.

The official returns of the quantity of foreign ores imported into this country during 1847, and the amount of duties paid thereon, are not yet available; I have, therefore, taken the returns for 1846 for my guide, although I believe that the former will be found to exhibit protection in a still more unfavourable light.

These returns are as follows:—

Foreign ores, containing not more than 15 per cent. of copper—

Ores.	Metal.	Duty.	Aver. p. ct. of the ores.	Amount of duty per ton of ores.
Tons.	*Tons.*			
19,126	2,266	£7,139	11¾	7s. 5d.

Ores containing more than 15, and not more than 20, per cent.—

6,121	1,056	£4,989	17¼	16s. 6d.

Ores containing more than 20 per cent.—

21,943	6,518	£41,066	30	37s. 5d.

Average produce of the whole ores, 20¼ per cent.; price per ton, 16*l.* 13s.; amount, 785,712*l.*; duty per ton of ores, 1*l.* 2s. 6d.; amount of duty, 53,196*l.*

I presume I need not use an argument to convince any one that the price at which British ores were sold, during the period in which the foregoing duties were paid, was not affected to the extent of one farthing per ton, except so far as the duties might have operated in checking the quantity of ores brought from abroad; and unless this last fact can be established, we are compelled to admit that the tax, whilst it takes 53,196*l.* from the pocket of the foreign miner, puts nothing into ours.

I have endeavoured to avail myself of information from most of the agents who have returned to this country from those mines which are sending us the principal part of the foreign ores, and in no instance have I discovered that our duties have had the effect of keeping ores at the mines. I know that the contrary has been asserted, and that some parties still maintain that considerable quantities of inferior ores are kept out of our market by the duties; but a glance at the scale of those charges on the ores is sufficient to confirm the statements made to me by the agents. By this it is seen that ores of 11¾ per cent. pay 7s. 5d. per ton. Is it reasonable to suppose, that so small a sum as this can influence the parties having the direction of the mines, and who reside on the spot, in sending the ores to this country, when they well know that the trifling variation of 3*l.* per ton in the standard at which the ores may be sold, will be equal to the duty on them? Again, if we take the next rate of duty payable on the ores, is it at all probable that a charge of 16s. 6d. per ton, on the ores raised from either of the mines in Cuba, will have the effect of keeping those ores there, when the parties are aware that the tax is only equal to 5*l.* per ton in the standard, and that fluctuations to that extent frequently occur in the course of a fortnight. The same remarks will apply with equal force to the highest rate of duty on the ores.

I trust that enough has been said to show that we derive but little, if any, protection from the duties imposed on the foreign ores; but I should leave the question very far from being settled, if I could be content merely with the view of it which I have given; and I will very shortly state why I fear that our fancied protection does prove to be a snare. Notwithstanding all that has been said for and against the establishment of copper smelting works in other countries, it is a fact that works of the kind are being prepared in France, and other places on the continent, and in the United States of America.

Now, I believe the most strenuous advocates for protection agree with the abolitionists in thinking, that the copper trade should be confined as much as possible to this country. The advantages to be gained by making Britain the copper market of the world might easily be made manifest. I will frankly admit, that I have as yet failed to learn in what country copper ores can be smelted so cheaply as they are in Wales; and I do not, therefore, regard the attempts which are making to take this branch of our trade from us in so serious a light as many others. But many years may be required to undo a small amount of mischief. That all these establishments abroad have their origin in the duties which we lay on foreign ores is unquestionable. Why, then, should we submit to ever so small an injury, without deriving the least benefit in return? There is, however, another and stronger reason for making a settlement at once and for ever of this question of protective duties. Whenever the copper miners find themselves in difficulties arising out of the low prices they obtain for their ores, their attention hitherto has been drawn away from the evil which really afflicts them, and, instead of applying the true remedy, forthwith issues a stirring appeal to the miners of Cornwall, in which they are warned of dangers which have no existence, and called upon to arm themselves in defence of rights which avail them nothing. Our representatives in Parliament are charged to do their duty, and, armed with petitions setting forth grievances of a most questionable character, to say the least of them, they are to do battle with Governments, tariffs, and all the other powers which threaten to interfere with that miserable remnant of protection—the copper ore duties. Feel assured, Sir Charles, that the reflecting portion of the copper miners of the county have ceased to place any faith in these proceedings, and are quite convinced that the ghost by which they have been haunted for many years, should now be set at rest. That the copper trade must always be subject to fluctuations arising from natural causes, in the same manner as every other trade is affected, we all readily admit; but that the fearful depression under which our copper mines are now struggling does not at all proceed from such a source, is very evident. I believe I am correct in asserting, that neither in the copper trade, nor any other metal trade in this country, has a state of things ever before been witnessed similar to that which the first now exhibits.

The ore sold at ticketing on the 20th Jan., realised prices equal to 60*l.* per ton for the metal, and those sold last Thursday about 64*l.* per ton, whilst the most inferior description of copper is now selling at 97*l.* per ton, thereby leaving a difference of at least 33*l.* per ton between what the miner and the smelter obtain for the article. From this sum the expenses of smelting and other charges have to be deducted. But it would not be difficult to show that, after making these deductions, a clear difference of between 20*l.* and 25*l.* per ton remains. Herein then is the great evil with which the copper mines are assailed; and it needs no great effort of reason to convince any one, that something more than the duties on foreign ores is required to restore to the miners some portion of the enormous sacrifice under which they are now bringing their produce to market. The usual practice is, to lay on the smelters the iniquity of being the cause of all our sufferings; but until we can find a race of men having the means and disposition to purchase our ores, and smelt them, on the principle of buying in the dearest, and selling in the cheapest markets, we have no valid grounds of complaint against the conduct of the parties in question. We are told that the sales of copper for some time past have greatly diminished, and that very large stocks of the metal are accumulating in the hands of the smelters, all which we may readily grant to be true; but we know, at the same time, that the consumption of the article, on the whole, is gradually increasing; and, consequently, that the demand for it by the manufacturer cannot be long delayed. These are facts of which the smelters are well assured, and yet they are enabled to purchase the ores at a rate which will leave them 25 per cent. profit. Let me ask, then, if all these circumstances do not furnish the most convincing proof that the capital now embarked in the copper trade is not sufficient to maintain that trade in a sound and healthy state, and that nothing but more capital will afford us relief, especially in times like the present. I might easily adduce other facts in support of this position, by comparing the trade as it is now carried on, with the manner in which it was done some years ago, but this is not necessary at present.

I wish to be distinctly understood, in contending for the employment of a greater amount of capital in the copper trade, that I do not imply any want of means on the part of the present smelters, as we very well know that it would be difficult to set limits to the capital which some of them might command; but when we consider that a trade involving, in 1846, the enormous sum of 1,731,755*l.* for the purchase of the ores alone, is now nearly all in the hands of five companies, and that upwards of one-quarter of that amount has to be furnished by one of them, it may be well imagined that the parties are satisfied with the interest they already hold in this business. Having, as I conceive, shown that it is only by an additional amount of money being invested in the smelting of our ores, that we can either be helped out of our present difficulties, or be saved from others for the future, I must leave to others to devise the means by which such capital is to be obtained. I may, however, be permitted to suggest, that those who are the most deeply interested in the working of the copper mines in this country, and elsewhere, should be prepared to assist themselves; and the only way in which they can do this effectually, will be by forming themselves, and such others as may be disposed to join them, into a smelting company, with sufficient capital to overcome every obstacle that may be opposed to them. It is generally supposed that 500,000*l.* would ultimately be required for that purpose; but I have grounds for believing that one-half that sum, if judiciously managed, and especially if invested in the present state of the copper ore market, would be productive of great benefit to the miner, and a handsome profit on the outlay.

Surely there must be among all the parties interested in copper mining, and bringing by their exertions upwards of 170,000*l.* worth of produce annually to market, men who can, without difficulty, command 250,000*l.* for the purpose of giving that protection to their property which all the legislation that may be employed will fail to give. That amount would be covered by the money now taken out of the pockets of the foreign miners, in the course of five years, and I think we cannot do better than say to these gentlemen, "we are prepared to assist you in getting rid of the duties on your ores, if you will lay out the amount of them, for four or five years, in the establishment of a new copper smelting company." I am, Sir Charles, your most obedient servant,

Whitehall, Truro, Feb. 2, 1848. WILLIAM FRANCIS.

RAILWAY STOCK.

SIR,—In your Journal of the 29th Jan., I see a proposition made to the Government, by one of your correspondents, as to the propriety of creating railway stock; and in your paper of last Saturday, I observe you quote the remarks of Mr. M. Patterson, of Glasgow, on the same subject. It is very clear, we require a greater amount of the circulating medium than we at present possess, to carry on the overgrown business of this country—without which we must transport one-half of the whole population to other countries. The Government of any country represents the head of a great family; and, as a parent watches over the comfort and happiness of his children, so ought a Government to provide and watch over the whole. Many will say, "let private interests alone"—so do I; but I also say, encourage those interests, and, when difficulties occur, assist them to get out of them. The failure of our crops, which invariably brings misery and want, is surely well worth the attention of the Legislature, particularly when we consider the very great number of acres of Crown lands the country possesses, and which might be turned to very profitable account. The money that has been uselessly spent in Ireland, would have put into a high state of cultivation, thousands of acres of the Crown lands of that country; the great army employed there could have worked in conjunction with the inhabitants of the country, under the control of their officers, and much good might have been effected in this way: one good example is worth 20,000 lectures. Again, the Government might have lent sums to the landowners, to improve their estates, under their own direction, or that of engineers appointed by them; the payment and interest of the capital advanced could have been secured by mortgage of the land, which would have stimulated the landowners to improvements. There could also have been no risk whatever in advancing money to the railway companies, to have enabled them to progress, in conjunction with the other improvements; and, by degrees, the whole country would have settled down in peace and quietness, and ultimately the gain to this country would have been great, instead of being continually an incubus around our necks. I cannot say how the enormous staff raised, to carry on railway works, was conducted; but I am well aware, many went there to perform the duties of engineers and surveyors, who were not competent either to use a chain or a theodolite; I can, therefore, imagine how the work must have been set out. If, therefore, the Government had begun with the Crown lands first, and proved what could be done, they would have set an example, that would have done more good than 20,000 bayonets. During the progress of the Ordnance Survey of Ireland, which lasted so many years, we do not find the people interrupting the men employed on that duty, although they were scattered over the face of the country, and removed, in many cases, miles from each other; and I do think, had the plans now proposed been carried out, we should have felt the benefit of them before this; and why not begin now? We have an immense number of able-bodied men receiving pensions from the country—why not employ them on such duties, making them, at the same time, constables, to preserve the peace? Some of the most efficient men in the metropolitan and other police corps have been in the army, and receive both pension and pay. I have no objection to pay them extra, as I certainly think that men who have served in the Artillery, and Sappers and Miners, could be usefully and profitably employed on the Crown lands of either Ireland or England. Where did the Roman people find money and men to execute the works they did in this country, the very ruins and remnants of which are patterns to the engineers of the present day?—in fact, it is the very spirit the Romans possessed, that appears now to be urging us on to vie with them. We must, however, take very different means to what we are doing at present, before we can equal them; let the Government, therefore, take steps to establish, and keep good, the credit of the country, and we shall progress, and keep the lead of all the nations of the earth. We talk of raising soldiers to protect us—I would say, raise the condition of your labourers, by feeding and clothing them first, so that they would have strength to combat with an enemy, should he appear, which I think is not very likely.

Abergavenny, Feb. 9. A WELLWISHER TO HIS COUNTRY.

COCHRANE'S CURVILINEAR SAW-MILL.

SIR,—In your last publication you state, that "On Tuesday, the Lords of the Admiralty paid a visit to the naval establishment at Woolwich, in order to inspect the new saw-mills, just completed by Mr. Rolt, the contractor;" and that "their lordships appeared to be highly delighted with the perfection of the machinery, and the excellent quality of its work." Allow me to inform you that the saw-mill, alluded to above, was made at the Rhydymwyn Foundry, near Mold, Flintshire, and *not* by Mr. Rolt. You also allude to "another mill for cutting crooked timber with the grain." This mill was probably made by Mr. Rolt, and this may have led to his name being given as the contractor for the whole.

Mold, Feb. 9. JOEL WILLIAMS.

THE HYDRAULIC TELEGRAPH.

SIR,—In your last week's Number appears a letter from your excellent correspondent, Dr. Murray, of Hull, which intimates doubts respecting the capacity of water, as a medium by which communications may be transmitted from one place to another, through the power of the "hydraulic apparatus," patented by Mr. Jowett, and now being exhited at the offices, Wellington-street, Strand. The incapability of this fluid, Dr. Murray insists, is dependent upon its known elasticity and compressibility—the result of tests made by professors, both in England and France. Now, admitting these experiments to be correct, and that water is, indeed, both elastic and compressible, Dr. Murray will not deny, that the *amount of compression is as a mere fraction, compared to the immensity of compressive power required to produce the effect.* Had Dr. Murray previously seen the very ingenious and simple apparatus at the patentee's office, and witnessed the ease and efficiency of its workings, I feel satisfied he would have abstained from opinions, calculated to prejudice the public mind, and impede the progress of science by restraint. To remove, if possible, the erroneous impressions Dr. Murray entertains, through ignorance of the principles of Mr. Jowett's instrument, I will briefly outline its pretensions. The constitution of water is such, as to require trifling force to propel, or displace it, let its confines be what they may. Being composed of globules, pressing each other equally at a point, and held together by attraction, it is possessed of an inherent power of self-propelling action, submissive to the smallest degree of impulse. A tube, of indefinite length, and perfectly air-tight, is filled with this fluid, and confined by a piston at each end, which work in two upright cylinders opposingly. The piston at this end of the tube being acted upon by a trifling leverage pressure, and meeting no other obstruction than an equal pressure of the piston at the other end, a consequent instantaneous communication is effected, and indices are at the same moment pointed to corresponding letters, words, or symbols, upon dials at each station. Dr. Murray will at once see, that his theoretical calculations have scarcely any connection with the practical principles of this truly-ingenious invention; and, like myself, and many others, anticipate its entire success for the benefit of the world in general.

Islington, Feb. 8. E. J. P.

PATENT HYDRAULIC TELEGRAPH.

SIR,—I am directed by the committee of management, in behalf of the patentee, to address you respecting a notice to correspondents, in the *Mining Journal* of Saturday last, addressed to "S.," Moorgate. Mr. Whishaw, Sir, is not connected with this establishment in any shape whatsoever; nor am I aware that any claim on the part of that gentleman could have authorised such a statement. With regard to any priority in the invention of an "hydraulic telegraph," by Mr. Whishaw, the patentee does not contest—the principle being known to every scientific man centuries back: he merely claims the application in the various *instruments* used by him for the purposes of hydraulic communication. You will have the goodness to insert this letter in your next Saturday's Journal, so that the erroneous impression, as far as Mr. Wishaw and the patentee of this telegraph is concerned, may be removed. H. A. JOWETT, Sec., *pro tem.*

Wellington-street North, Strand, Feb. 11.

EXCHEQUER BILLS.—The total amount of Exchequer bills authorised to be raised and to be provided for in the present year, is 17,946,500*l.*

CLARKE AND VARLEY'S ELASTIC TUBE ATMOSPHERIC RAILWAY.

Fig. 1.

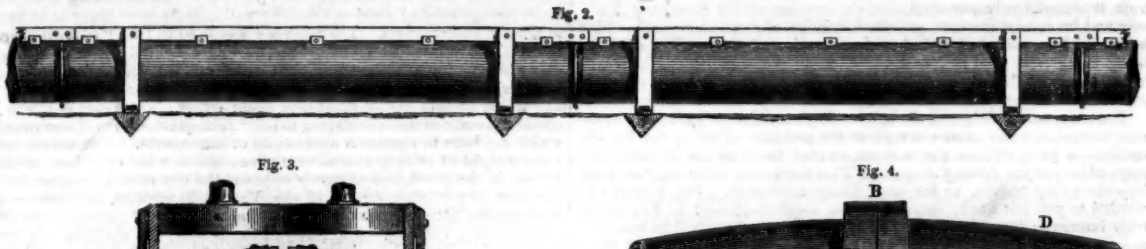


Fig. 2.

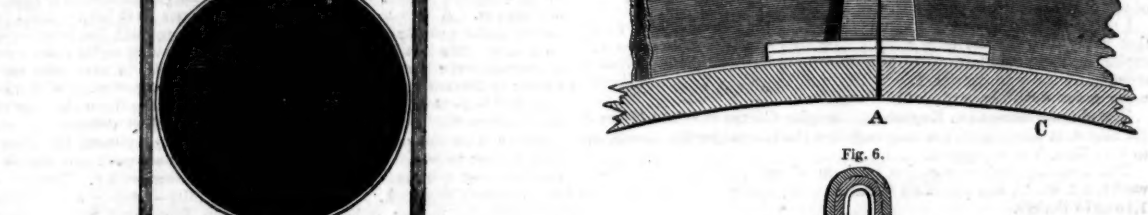


Fig. 3.

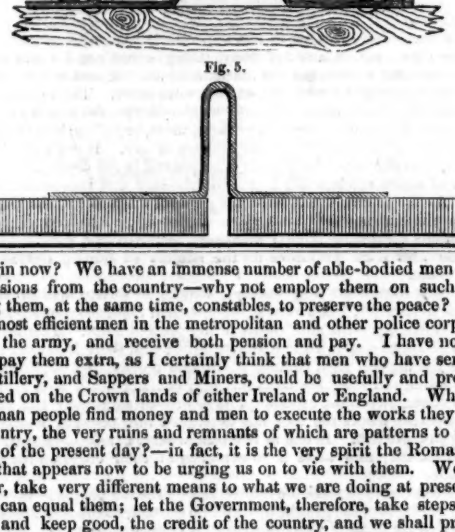


Fig. 4.

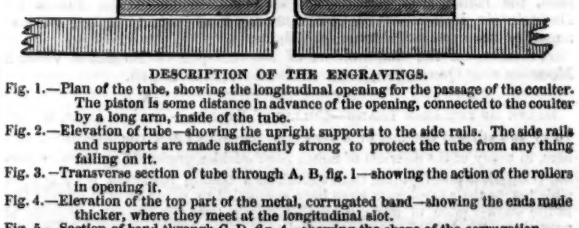


Fig. 5.

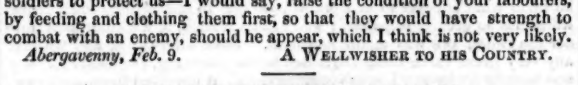
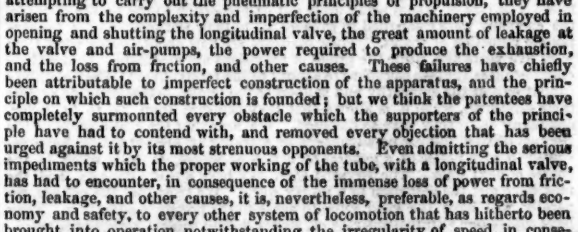


Fig. 6.



DESCRIPTION OF THE ENGRAVINGS.

Fig. 1.—Plan of the tube, showing the longitudinal opening for the passage of the coulter. The piston is some distance in advance of the opening, connected to the coulter by a long arm, inside of the tube.

Fig. 2.—Elevation of tube—showing the upright supports to the side rails. The side rails and supports are made sufficiently strong to protect the tube from any thing falling on it.

Fig. 3.—Transverse section of tube through A, B, fig. 1—showing the action of the rollers in opening it.

Fig. 4.—Elevation of the top part of the metal, corrugated band—showing the ends made thicker, where they meet at the longitudinal slot.

Fig. 5.—Section of band through C, D, fig. 4—showing the shape of the corrugation.

Fig. 6.—Section of band through A, B, fig. 4—showing the thickness of the band where it meets at the longitudinal slot. The diagrams represent the band full size.

The patentees and proprietors of this principle, which has now been so long exemplified, in a full-size working model, at the Poplar station of the Blackwall Railway, having thoroughly matured the system, and, as we find by advertisement in another column, being prepared to treat with railway companies, we again call attention to the details of its progress and working—first, briefly premising, that whatever obstacles and failures may have hitherto occurred, in attempting to carry out the pneumatic principles of propulsion, they have arisen from the complexity and imperfection of the machinery employed in opening and shutting the longitudinal valve, the great amount of leakage at the valve and air-pumps, the power required to produce the exhaustion, and the loss from friction, and other causes. These failures have chiefly been attributable to imperfect construction of the apparatus, and the principle on which such construction is founded; but we think the patentees have completely surmounted every obstacle which the supporters of the principle have had to contend with, and removed every objection that has been urged against it by its most strenuous opponents. Even admitting the serious impediments which the proper working of the tube, with a longitudinal valve, has had to encounter, in consequence of the immense loss of power from friction, leakage, and other causes, it is, nevertheless, preferable, as regards economy and safety, to every other system of locomotion that has hitherto been brought into operation, notwithstanding the irregularity of speed, in consequence of the variable rate of exhaustion, and the great uncertainty of the arrival of the trains at the different stations along the lines. We shall now proceed to show, that this invention, with the elastic wrought-iron tube, is the simplest method that can be devised for connecting the piston with the train, since no lubrication is required—the coulter, or connecting plate, passing along the longitudinal groove, or slit, without any sensible resistance; and that, both in the original cost of construction, and expense of working, it is vastly beneath any other system of railway transit, which has hitherto been brought into use. The tube, or pipe, in which the exhaustion takes place, is constructed of sheet-iron, rolled to a proper thickness, cut into proper lengths, and of the requisite width, to answer the intended diameter; these sheets are then formed into tubes, in the usual way, by means of rollers, to render them truly cylindrical—a shape which induces a tendency to close, in consequence of the elasticity of the material—so that the edges, which are truly planed, come together, at all times, with a slight degree of force; but when the exhaustion takes place, this force is increased by that due to the difference of pressure between the external air and the partial vacuum within the tube, thus forming a perfectly air-tight connection; and when the tube is thus completed, the attachments for opening it are rivetted on. In laying down a line of tubing, the ends of each piece are merely made to abut against those adjacent to it; over these is lapped a slip of corrugated sheet-copper, securely soldered to each tube, the ends being previously prepared in a most efficacious manner, lately discovered by the patentees, and thus effectually allowing for expansion and contraction—(see *fig.* 1).

Along the whole range of the line of railway are placed longitudinal bars of malleable iron, one on each side, which bars are connected from the top of the tube and supported from the sleepers. A framework is fixed to the leading carriage of a train, in which two pairs of horizontal wheels revolve in contact two and two—one pair before, and another behind the coulter, or connecting-plate (see *fig.* 2), by which the motion is communicated to the train; this is a steel plate, half an inch in thickness, and of a width sufficient to confer a competent strength for drawing the heaviest train that may ever be attached to it. The horizontal wheels, just mentioned, are of such diameter, that when between the bars they force them open, and, consequently, open the tube to the same extent, and admit the connecting-plate to pass along without friction, as the opening thus effected is greater than the thickness of the plate; and the elasticity or spring of the tube has a tendency to bring its edges together behind, and counteract the force required to open or extend the distance between the longitudinal bars in front, which opening is effected by a compound rolling motion—thus almost completely neutralising the effect of friction in producing the transit.

This plan has been, and is daily being tested, on an experimental line of 300 ft. in length, and with a tube of 15 in. in diameter, laid down near the Poplar station of the London and Blackwall Railway; and it is found that the edges of the longitudinal slit come into sufficiently close contact to render the tube, for all practical purposes, perfectly air-tight, so as to admit of its exhaustion to any required degree by means of the air-pump. With respect to the various details of working an atmospheric railway on this system, we would just observe, that the patentees have devoted their sole attention for the last three years to bring it as near perfection as possible; and that they state they are prepared with simple and most effective plans for stopping at stations, passing at sidings, and other movements, which have hitherto proved to be difficulties, and with such facility, that they would undertake to work a line four miles in length—such, for instance, as the London and Blackwall Railway—with trains each way, passing every 15 minutes, with the greatest regularity, and that, too, with a single line of tube.

Having thus given a complete description of the working of the elastic tube atmospheric railway, we would draw attention to many advantages which are stated to exist in the pneumatic principle itself, on which we believe but little thought has been bestowed. On lines, where the traffic is moderate, the stationary engines, during the time they are not required for forming the vacuum, might be employed in grinding corn, pumping water for irrigating or draining lands, sawing timber or stone, and a variety of other useful and profitable mechanical or agricultural operations—while the possession of great power at intervals through a line of country connected by a railway, would enable a company, by judicious management, to let off a large portion of the power with great advantage. For foreign countries, in particular, this system offers immense advantages; and the tubes being so light, they can be transported from place to place with the greatest facility—while the inclines which can be overcome, renders the first construction of a railway, as compared with the locomotive system, most particularly economical, by avoiding a vast deal of cutting and embankment. The parties interested invite the engineering and scientific

talent of this and other countries to inspect the full-sized experimental line, which is at work daily, from one till four. The most scrutinising and searching investigation is desired, the patentees being convinced that the problem of the practicability of railway traction on the atmospheric principle is solved—this opinion being borne out by many hundreds of talented individuals, who have minutely inspected the working during the past two months.

The system may now be considered complete: it is, in every point of view, *a perfect metallic railway*, no decaying substance, such as leather or caoutchouc, being employed in its construction, or any description of lubricating matter required. It has been working through summer's heat and winter's frost and snow; and we can affirm, from our own personal inspection, that the tube is in a better working state than at first.

From numerous experiments, taken with the utmost care, on many different occasions, and in all states of the atmosphere, the leakage is found uniform, and upon the average 1 in. of the mercurial gauge falls in 5 minutes, when the pumps are allowed to remain at rest.

We understand the patentees are about to introduce a novel mode of "suspension railway," in connection with the tube, highly suitable for carrying goods in general, for mineral districts, or for feeders to trunk lines from small populated districts, a description of which we shall give in a future Number.

MINING IN SOUTH AUSTRALIA.

[FROM OUR CORRESPONDENT.]

The Burra Burra Copper Mine continues to be the all-absorbing subject of interest: every stranger who comes to the colony goes to see it, and returns perfectly amazed at the riches displayed. You will, of course, have received, and published before now, the second annual report of this mine, dated April 21. I enclose another, in case it has not yet come to hand. You may rely on the correctness of the statements. There are, *at present*, at the mines, 3500 tons of dressed ore; a very large proportion of which of very high per centage: the quantity in view would puzzle the cleverest miner to estimate. Look where you will, in any of the levels or shafts, rich grey copper, and malachite, stare you in the face. The rainy season has this year been much heavier than any since the establishment of the colony; every bridge in the colony has lately been swept away, and the state of the roads will not allow of any cartage to be done just now. How long will it be before the British capitalists will open their eyes to the importance of the mineral discoveries in South Australia? Here we have *one* mine, as you will perceive by the report, spending 21,000*l.* on cartage in 18 months, over a perfectly flat country, all the way from the port to Burra, 100 miles! With British capital, an iron railway for horses, would soon connect every mine in the colony with the shipping port, —and only think what profits would then be realised. But, no! you Londoners prefer dealing with Spaniards, Brazilians, and Mexicans, than with your own countrymen. But a time will come, when this province will be thoroughly understood; and then John Bull, who would have nothing to do with us when mineral lands could be had cheap, will be fretting and fuming that he has to pay dear for what he, a few years before, might have had at little cost. Talking about English proprietors—I can tell you a good story. Mr. ——— of Dublin, had sent out to his brother-in-law a little money to invest here, which arrived just at the moment when the Burra Burra special survey was taken. He took 60 shares (or thereabouts), which cost 5*l.* each, and wrote to inform his relative of it. The latter gentleman, as soon as he heard of it, immediately wrote back strict orders, *to sell out instantly; "that he had lost 2000l. in a mine in Mexico, or some other place in South America, and that he was quite sure he would be ruined if he kept these shares."* Of course 12 months elapsed, between the period of the purchase and the period when the order to sell arrived. These shares were consequently sold the day after at 100*l.*! —100*l.* each!—So that this gentlemen netted 5700*l.* by the transaction. You, who are so well acquainted with the feeling in England, will at once say, that the opinion entertained by the Dublin gentleman, is a very universal one in Great Britain. "I have burnt my fingers in Mexico, or Brazil, or Cuba—*ergo*, I would also lose money if I tried South Australia." This is the way people reason; and as it takes a deal of persuading to overcome this stubborn feeling, years will elapse before this colony is rightly understood. But the time *will* come; English capital will lay down railroads for us to our mines, will establish smelting works, and erect steam-engines for us: and English capital will receive *dividends* such as have not been heard of for years past.

But to return to the Burra Burra:—You are aware that the property consists of 10,000 acres (the remaining 10,000 belonging to the Princess Royal Company), divided into 2464 shares, of 5*l.* each, paid up; or, 12,320*l.* capital. *Two* dividends, of 2*l.* 10s. per 5*l.* share (or 50 per cent.), have been paid in July, by which the whole of the original has been returned; a *third* dividend, of 5*l.* per share, or 100 per cent., has just been declared; and, probably, every month or six weeks will see a similar one! The merchants have lately established a sort of market for the purchase of the ore from the different mines as it arrives at the port. Hitherto, the banks would only advance 6*l.* or 8*l.* per ton, even on the best ore. Now, the merchants, who, from the flourishing state of trade, have large remittances to make to their constituents in England, and would otherwise have to pay a premium to the banks, for bills of exchange, purchase the ore from the mining companies on the following plan;—Parties are now, from experience, able to give a pretty fair guess as to the probable metallic contents of a heap of ore; the Burra Burra Company thus sell 100 tons, for instance, to A. B., guaranteeing that 100 tons, at 20 per cent.; A. B. takes an average of the price of metal, from two or three of the last Swansea sales, and says, for that heap, I will give you such a standard; another merchant will, perhaps, raise a little on it—so that virtually, the only price settled here and paid for, is the price of the copper metal; the merchant running the risk of profiting or losing by a rise or fall of the metal by the time the ore arrives at Swansea. Should the heap, when sold, be found in Swansea to contain 25 per cent., instead of 20 per cent., then A. B. makes good the difference to the company. In the other case, of a less produce, the mine makes good the difference to A. B. The arrangement suits both parties. A. B. saves premium on bills of exchange, and makes a commission on sale of ore in England. The mine, instead of having to wait 12 or 18 months for the net proceeds, being formerly only allowed to draw barely enough to pay for the prime cost of ore, now is enabled to divide profits as fast as the ore is delivered at the port.

Large sums of money are kept constantly in circulation, and everybody is pleased; and none more so than the Burra Burra proprietors, who will not know what to do with all their money, if these dividends continue to tumble in upon them at the same rate. An 80-in. cylinder pumping-engine is ordered to be sent out by this ship. The smelting has not yet succeeded; they have only tried a horse-power blast, which will never answer. They have collected large heaps of charcoal at the mine, which costs them 5d. to 6d. per bushel, of 72 lbs. weight. The Murray scrub will yield an inexhaustible supply of charcoal wood, of the best description. The shares are now firm, at 100*l.* cash. Many of the present holders of the shares themselves paid dear for them, and incurred heavy liabilities, paying sometimes 30 per cent. for money to buy Burra Burra shares; were it not for these dividends, some of them would have to sell—as it is, only very few shares change hands; and were it known, that any monied person wanted to buy, the value would immediately rise, as in this small community nothing is long kept a secret.

Mr. Morehead, who purchased the 640 acres adjoining the Burra Burra north end, for the Aberdeen Company, is sinking actively, and there can be no doubt of their cutting some of the great lodes soon—this is the Bon Accord Mine. The south end, or Princess Royal, which was the original monster mine, has not discovered any settled lodes, although the "country" is full of indications; but, unless people find hundreds of tons, 6 in. below the surface, a mine is not much thought of in this colony; they will be wiser by-and-bye. You will laugh when I tell you, that as no great lodes have as yet been cut in the Princess Royal, some of the holders are fidgety, and half inclined to sell their shares. They have sunk in four or five different places, through the richest indications imaginable, nowhere more than from 12 to 18 fms; the small strings of ore they have cut have produced enough to pay their way, being of very rich quality; the surface indications extend visibly to the naked eye for two or three miles on this property; meanwhile, the shares are low. This 10,000 acres is held in 400 shares, 37*l.* paid up (14,800*l.* capital); cash price, 80*l.* per share; credit, 100*l.*—in fact, the shares would never be an hour in the market; there are some few individuals here, who would buy up all that might be offered for sale. Adjoining this south end is a similar 640-acre block to the Bon Accord at the north end; this block belongs, I am told, to the Messrs. Dutton—one of whom lately returned to the colony from England, and is the author of a work on South Australia, which you noticed in your Journal. I must explain to you how it came that two 640-acre blocks were surveyed and sold at each extremity—it was thus: the present Princess Royal is the original "monster mine," so called from the monstrous abundance of surface indications. A special survey was applied for, and granted, by Governor Grey; whilst the applicants and the Government surveyors were on the ground running the lines, of the 20,000 acres, a shepherd came to them, and told them that a few miles further north a rock of green copper ore was sticking out of the ground as large as a house. Surveyors and all went up to see it; and there, sure enough, was the rock of copper ore. The distance was immediately measured off, and, strange to say, it was found that eight miles, being the longest side of the parallelogram allowed by Government to be taken, just took in this big rock at the northern extremity, and a large portion of the outcropping at the southern end; but the survey could not take it all in, so, after the 20,000 acres were measured off, it was found that the extra 640 acres at each end took in all that was visible. The 20,000 acres were, of course, claimed under the regulations then in force, at 1*l.* per acre; but the two other blocks, being put up to auction, met with such competition that *each* block fetched upwards of 5000*l.*, and both of them will, no doubt, prove large fortunes to their respective proprietors. The large number of miners, with their families, now living at Burra Burra, made it impossible for that company to build houses for them all—so the miners set to work excavating in the banks of the Burra Creek, and in walking along the top of the bank, you will see scores of chimneys sticking out of the ground as it were, which has a curious effect.

Next in interest is the Kapunda Mine, but there is little to be said about it at present, most of the shafts are under water. This mine will not make a show in the Swansea sale lists next year, or, perhaps, longer, as the engine has not yet arrived, and, when it arrives, must take a considerable time to be set up, as we cannot get on here like you do in Cornwall. The *Royal George* takes about 270 tons of pretty good ore from this mine, which will be the last of any amount for some time to come. The produce of this mine, you are aware, has sold very high; and, if you refer to the report of the Burra Burra Mine, which is 50 miles further from the port, and that they can deliver their ore at the port for 6*l.* per ton, a large profit must have been already divided from the Kapunda. The property being in private hands, nothing certain, of course, can be known. Another report current here is, that the younger Mr. Dutton, lately come out, has disposed of his one-fourth interest in this mine to a London firm for 12,000*l.* or 15,000*l.*; I give it you as I hear it. It has also been stated in the papers, of the 4th inst. here, that the London purchasers of the one-fourth offered to give 180,000*l.* for the remainder of the mine; this was too absurd to be believed for a moment, and the next paper contained a contradiction, "by authority"—so, between assertions and contradictions, one does not know what to believe. Splendid lodes of copper are repeatedly asserted by the papers to be discovered here, and there, and everywhere, and as repeatedly found to be "humbug;" but most people are so accustomed to these reports now, that not the slightest credence is paid to them, except they are confirmed by ocular demonstration. Really this province requires no puffing; if they would only leave well alone, and confine their remarks to record what really is true, they would be entitled to more respect as editors, and do the province good instead of harm, which all unfounded and exaggerated accounts must do.

A great many sections are now sold round Kapunda—none of which have produced any thing as yet. The North Kapunda Mining Company bought land round Kapunda Proper to the tune of 21,800*l.*, divided into 436 shares, of 50*l.* each. The so-called North Kapunda—a section of 80 acres, adjoining the northern end of Kapunda Proper—was run up by Mr. Bagot's opposition to 7000*l.* at the public sale. They have gone down 25 fms., without so much as the merest trace of copper. The shares are unsaleable at 12*l.* 10s., or 75 per cent. discount, at which price they are quoted in to-day's share list.

Some of the sections in this locality are held by the Royal Mining Company —10,000 shares of 10*l.*; 10s. paid up; price, 12s. This company was formed on such a large scale as to give every individual in the colony the chance of having shares—their object being to keep foreign capital out of the market, should mineral lands be put up to auction, which would be thought valuable as an investment; in that case, they would make a call of 10s. per share, which would produce 5000*l.*, and enable them to pay deposit on 50,000*l.* worth of land. A month is granted by Government to pay the remainder; during this month, the most active researches are made on the lands bought. If promising, the necessary sum is called for; if otherwise, the deposit may be forfeited, which, from the large number of shareholders, would not be severely felt. Hitherto, they have only laid out 4000*l.* or 5000*l.* It remains to be seen whether the shareholders would pay up any really heavy call, should valuable land be sold. This company looks formidable, and contains almost every one in the colony on its lists. This forfeiting of deposits has very frequently been done. Sums of 500*l.* each were forfeited on the two 640-acre blocks north and south of Burra Burra before those blocks were taken by their present proprietors; and Capt. Bagot forfeited some 500*l.* likewise for land round Kapunda. If a piece of ground is run up to (say) 1000*l.*, and 100*l.* is forfeited on it, no person can ever claim that section at a lower price than what it fetched at auction, less the deposit.

The London Australian Mining Company, who have a special survey at Reedy Creek, have, up to the present time, raised not a single ton of ore; they are down better than 30 fms.; and a "report" has reached town this week that they have now struck a good lode. They have large quantities of what was thought by some to be tin ore on their land—samples have been sent home; and, if it is tin, the news will, of course, have found its way into the London papers long ago. Some persons, cunning in metals, call it iron. The *John Bartlett* arrived here last week, chartered by the London board, to take back the ores which it was expected were ready for shipment from their land at 4*l.* 12s. 6d. per ton, but, unfortunately, there is not an ounce of ore ready yet; so, to fill up the ship, Burra Burra ore is put on board instead, purchased on the plan as explained above. Another ship, similarly chartered, is on the way out. We perceived that the shares of this company had reached 12*l.*, and were last quoted at 8*l.* How on earth they ever got up that length, with present prospects, is a puzzle. Why, these prices would give a *larger* value to their property than the Burra Burra shares can be bought for at the present moment. A few sections, near Kapunda, also belong to this company; but which, like the others, have produced nothing as yet. But we were still more surprised at the Barossa Mining Company's shares having unaccountably risen to 25*l.* in London! The mine which every one thought existed on Mr. Angas's land, has long since been abandoned by Capt. Rodda, the mining captain of this company. He is sinking on some land on Greenock Creek, not belonging to Mr. Angas, but leased for his company; they have not found any ore yet. If it is really true that 25*l.* has been paid for shares in this mining company, the purchasers will repent it; and it can but be a subject of much regret to the colony at large, as it will have a very injurious effect on the British public. The Barossa Mining Company is the least promising of any mining concern in the colony—not even excepting the poor gold mine, about which such a fuss was made. Let it be remembered, that the shares in this company are only shares in a lease of supposed mineral lands, but that the other mining companies are freehold property; there is a vast difference in a share in a lease, and a share in a fee simple.

The Montacute Mine is not at work just now. Mr. Drury, the mining captain, was unfortunately killed at the Paringa Mine, by falling down a shaft; this was one reason; then men became scarce, owing to the numbers that flocked to Burra Burra, and the shareholders disagreed amongst themselves—so, for no good reason that any one could give, one of the most promising mines in the colony is at a stand-still; but this, I understand, will not last long. The last sale of ore from Montacute, of which accounts have been received, was 22*l.* per ton.

The Adelaide Mining Company, who are working on some sections of theirs, near Montacute, have several sets of tributers at work. Their 5*l.* shares are quoted at 4*l.* 10s., but are rising.

The South Australian Company's mineral lands, at Mount Barker, 12,000 acres, bid fair to make up in value for all their sunk capital in former unprofitable land investments. The place where they are at work is called Kanmantoo; they are getting, I hear, 60 tons a week of very good ore.

The Paringa Company consists of the remaining 8000 acres of this survey, and is equally in high repute—the shares being at a premium of many times prime cost; but as none have changed hands for a long time, no quotation can be made. Of the lead mines, little is heard at present—the big copper mines completely eclipse the lead. So much for the mines in work now, or of old date. In the way of new discoveries, the 200 acres purchased by Capt. Hart, on the sea-shore of Yorke's Peninsula, have caused immense excitement. The Government surveyors did not discover the copper on the ground, and Capt. Hart thus got it at cost price—1*l.* per acre. The copper is *pure grey copper ore*, averaging 38½ per cent.; and the lodes run from the land into the sea, or from the sea into the land. The position of the mine bears north-west from the port of Adelaide; it is situated on the eastern shore of Yorke's Peninsula, and ships of 500 or 600 tons can lie within 200 yards of the beach, completely sheltered from the north-west and south-west winds, which are the only winds that blow with strength. This is decidedly the greatest hit for the last few months past. It is understood, that one-third of the property has changed hands, at something handsome.

The Mount Remarkable special survey contains much indication; it is, however, looked upon as a failure, and the original shares are at a discount.

The Government will not grant any more special surveys—everything will, in future, be sold by auction; and many longing eyes are cast to the Emu Plains, 100 miles north-west from Adelaide, where a hill of copper exists, which is thought to be far greater than the Burra Burra deposit. A special survey was applied for here long ago, but the Governor will neither grant that, nor sell it in small lots; and the banks have commenced shipping back bullion to London, as there was more money in their coffers than they had employment for. A good many emigrants are now arriving, but the labour market is as bare as ever: 48 hours after an emigrant ship reaches the wharf, not a man, or woman, is to be engaged. A first-rate mining surveyor would also make a large income here, as a "consulting physician," for the different mines; 50*l.* has been paid, before now, for a day's inspection, and advice founded on such survey.

Immense herds of cattle have been brought over from New South Wales, in anticipation of the demand for working bullocks for draught—a consequent reduction in the value of stock has taken place, and herds of mixed cattle have been sold for 25s. a head. Provisions, of all kinds, are in great abundance, and at prices which place abundant supplies, of every necessary article, within reach of the commonest labourer's family.

The Royalties Bill is still an open question. The colonists take their land grants, containing the reservations, under official protest; and the Governor continues to advertise land for sale, with those reservations; but the general opinion is, they can never be enforced.

The Madrid mails of the 3d have arrived, by which we learn that the Chamber of Deputies was to sit on the 4th, when it was expected that the reports of several committees would be read, and more particularly that upon the regulation of the mines. It is said that the question of salt would be one of those which would provoke an animated debate.

THE FLINTSHIRE MINES.

TO THE EDITOR OF THE MINING JOURNAL.

SIR,—I have to apologise for intruding on you with this letter, and shall feel much obliged by your giving it insertion in your valuable Journal. I am going to speak of the management of the Flintshire mines, which, I confess, was much improved, about 20 or 30 years ago, by a new system being introduced—at first reprobated by the interested, but afterwards approved by all; but, within the last few years, the spirit of mining, the capital and good management, has disappeared, as by magic, and the management of the few mines at work is on the principle of being considered to him as his fee simple, no one daring to interfere with it—the bargains being set in private underground, no one knowing what the other is doing—consequently, a man is left out of employment, however good a miner he may be; perhaps, the agent, by himself, or through his friends, working a part of the bargain by wages' men. Saying the least of it, agents are managers, cashiers, and clerks, all combined in the same person. They are shopkeepers, selling provisions, wearing apparel, &c.—selling to their favourite men candles, powder, iron, steel, smith's-work, pick hilts, shovels, and shovel hilts; in short, every material used by miners, as well as keeping horses for drawing whimseys; and, I believe, the carriage of bowse, and, in many instances, supplying timber, boards, &c., to adventurers—so that it will be immaterial to the men the quantity of materials charged, or the price charged for them, as a price is supposed to be given for the work, to have so much for wages. The practice thus pursued, keeps me and others in the back ground—ont of employment; and my friends, shopkeepers, horse-keepers, &c., are much injured by such monopoly; and last, not least, the adventurer, who I cannot think much benefitted by such a system of management, to say nothing of his chance of being a great, a very great, loser thereby. Mines, too, in the neighbourhood, deserving of trial, are left unwrought, in consequence of the lethargy countenanced, and of lords demanding high and ruinous royalties—discouraging the spark of spirit, which now and then makes a gloomy light for a short time, and is again extinguished; and mining in this county appears to me to be brought to as dead a standstill, as the Israelites were when driven to the Red Sea; and how it is to be redeemed again appears to me, and others, the difficulty. Some say one thing, some the other; but the prevailing opinion is, that adventurers, lords, and their agents, are much to blame, and that it is in their power to restore, in the shortest time, that confidence and good management in mining, which will again make our little county a great mining one. I pray the time may be hastened, when all labour shall be free, each man having a fair chance, without cousinship, or partiality—my motto being "fair play."—A HARDWORKING FLINTSHIRE MINER.

Feb. 9.

GREAT WHEAL FREDERICK MINE.

SIR,—My attention has been directed to a letter in your last week's publication, signed "Vox." When I first read that extraordinary production, I considered it would be sufficient were I to reply—"If 'Vox' be a shareholder, he could have attended the meeting, and have given, or withheld, his sanction to the arrangements; or, if he be not a shareholder, the questions are impertinent, and unworthy of a reply." On reflection, however, I considered, if I adopted such course, it might be charged, that I was thereby evading the question; I, therefore, determined to give you every particular, relative to the sale of shares in this mine, and to the call now made. I have been working the Wheal Frederick Mine more than two years, individually paying all costs, and developing her resources. About a year ago, I felt disposed to part with one-half the mine, for the purpose of putting her into full operation. I, therefore, made an arrangement with Mr. William Crossman, who undertook to sell 1000 (2048th) shares, at 2*l.* per share, from which I was to receive 1000*l.*, and Mr. Wm. Crossman 1000*l.* for his commission. The machinery was not to be erected, nor was the mine to be put fully to work, until the 1000 shares were disposed of. The purchasers of the shares were then to pay a call of 10s. per share; I was, from the purchase money I should receive, to pay a little call on the 1000 shares I retained, and the remaining 500*l.* was to go against my previous outlay. Mr. Wm. Crossman immediately sold to his friends 300 shares, paying me 300*l.*, and retaining 300*l.* He then ceased to make any exertion, and a delay of nearly 12 months took place, during which I paid all the costs of the mine, although I was entitled, from the day of sale, to call upon each shareholder for their portion of the costs. Some of the parties became urgent that the mine should go to work; whilst others were disposed to wait until the moiety of the shares should be sold. In consequence of this, I convened a meeting at Tavistock, on the 18th of December—none of Mr. Crossman's friends attended. I then resolved to *give* 500 shares to the mine, to be sold at 2*l.* per share, and to give up the money I had spent, upon condition that the other shareholders paid the call of 10s. per share, as formerly agreed upon. The 300*l.* I received has been spent on the mine, and I believe there is yet about 20*l.* owing, and the mine is stopped for the present.

From Mr. Crossman's friends, the present complaint, or attack, proceeds; and I leave the public to decide upon its justice. I have done, and am yet ready to do, all and more than I promised. The mine I believe to be an excellent speculation, fully justifying all the reports I have received; and I do not consider that any of the features of this "El Dorado" have been magnified beyond their due proportions. I am not desirous of drawing one penny from the mine; but I am anxious to see her in full and effectual work from the sale of her own shares. If the shareholders forego their right to attend the meetings, and wish the business to be conducted through your Journal, they are quite at liberty, provided you will kindly afford them space, to call upon me through such public medium, and I shall be quite ready to reply; and I shall—notwithstanding the clamour of an individual, who, I believe, will be found to have no interest in the mine—maintain my right to pass resolutions, at any duly-convened meeting, which may be unattended by Mr. Crossman's friends; and I shall take care that such resolutions be equitable, and in accordance with the spirit of prior agreements. I contend that the resolutions which I did then pass, are in conformity with the spirit of the prospectus under which the shares were sold—the only difference being in favour of the other shareholders; inasmuch as, under the prospectus, the 1000 shares were to be sold *for my own advantage*—whereas, by the resolution, I give the whole proceeds of the 500 shares, at 2*l.* per share, into the funds of the mine; and, as such, they are now advertised, with the deduction only of the most moderate commission. Your correspondent then inquires, how it comes that the shareholders were directed to pay the calls to Messrs. Barnett and Co., in London, instead of Messrs. Gill and Rundle, of Tavistock? My reply is, the former parties are the agents of Messrs. Gill and Rundle; and it was considered more convenient for many of the shareholders to pay their calls to Messrs. Barnett and Co., to be by them transmitted to Messrs. Gill and Rundle; and they received their notice accordingly.

Having thus replied, as fully as possible, to the inquiries of your correspondent, I beg further to observe, that I consider *the sale of shares, the amount to be paid into the funds of the mine*, to be the most legitimate mode of disposing of a portion of the interest *of young mines*, and the most satisfactory mode to persons desirous of adventuring. I adopted such system, some months since, on a very extensive scale, in an important mine, now at work under the most important auspices. I adopted such system again, a short time ago, in South Wheal Betsey—the whole of the shares so apportioned, were immediately purchased, the mine was put to work, and already gives prospects of speedy returns.

I am now adopting the same system in other young mines, where I can safely rely upon the returns of my outlay, and for my ultimate profit from the returns; and I am not to be laughed out of my system, but shall be well pleased to place the substantial good thereby produced (if it leads only to the opening and working of two or three mines) in juxta-position to the jeers of your correspondent.—FREDERICK S. THOMAS: *Feb.* 10.

THE DIVINING-ROD.

SIR,—In reference to your quotation from a correspondent of the *Penzance Journal*, it may be observed, that the writer lays no claim to the title of "Philosopher," except as a "lover of wisdom," which the word literally means. As to a "shock," I said nothing of the kind; and I beg to remind this conferrer of scientific degrees, that there are known to exist powers in Nature, that elude the most recondite researches of the "Philosopher." An electric, thermo-electric, or voltaic current, may affect a muscle without a shock, as well as raise the hair, or radiate fine fleecy substances; but, probably, your correspondent will say, that the "philosopher" alluded to was Mr. Hunt, and not myself. If so, he should look into his "Lindley Murray," and make himself acquainted with the proper application of the possessive and nominative cases, and the third person singular.—A. T. J. MARTIN: *Penzance, Feb.* 7.

THE IRON TUBULAR BRIDGE OVER THE CONWAY.—In our last Number, we inserted a notice of the success of the experiments made for the purpose of testing the strength of this novel structure, in which we stated that, with a load of 300 tons, besides its own weight (1300 tons), the deflection was 3, 4, and 5 in. respectively. As many of our contemporaries have varied considerably in their accounts of the experiments making—a difference in the deflection from 1¾ to 11 in. with the above load being stated—we are glad to be able to give the results as stated by Mr. Fairbairn himself, in a communication to a friend, from which the following is an extract:—"We have solved an important problem in practical science; and, despite the prognostication of some eminent mathematicians, the whole of my experiments at Millwall have been more than realised. On Wednesday last, the tube was suspended upon temporary piers 400 ft. span; and, with its own weight (1300 tons), the deflection did not exceed, but was under, 8 in. With 300 tons of loaded trucks, the deflection was increased to 11 in.—being, as near as possible, in the ratio of 1 in. to 100 tons of load. The computed breaking weight of the tube is 2200 tons equally distributed, exclusive of its own weight; and, having its perfect retention of form and great rigidity, I am of opinion that it would sustain 3000 tons before fracture took place."

ROYAL COLLEGE OF CHEMISTRY,
HANOVER-SQUARE, LONDON.

THE PRACTICAL COURSE OF SCIENTIFIC INSTRUCTION

In this institution is under the DIRECTION of Dr. A. W. HOFMANN and assistants.

The NEXT SESSION will COMMENCE on MONDAY, the 6th of March, in the NEW LABORATORY, and END on the 31st July.

The fee for students, working every day during the session, is.. £12 12 0
" " " Four days in the week 10 0 0
" " " Three days " 8 0 0
" " " Two days " 6 0 0
" " " One day " 4 0 0

The Hours of Attendance are from Nine to Five.

Further particulars may be obtained on application to the secretary, at the office of the college, Hanover-square. WILLIAM JOHNSON, Secretary.

KING'S COLLEGE, LONDON.—LENT TERM, 1848.
GEOLOGY:

OUTLINE OF A COURSE OF LECTURES, TO BE DELIVERED

By D. T. ANSTED, Esq., M.A., F.R.S., F.G.S.,

PROFESSOR OF GEOLOGY TO THE COLLEGE, FELLOW OF JESUS COLLEGE, CAMBRIDGE, &c.

LECTURES I. TO V.—INTRODUCTORY.

Physical Geography, with reference to Geology, and an account of the causes of change acting at present on the earth's surface, and the effects of those causes.
The study of existing animals and vegetables, with reference both to Geology, and to the determination of Geological Problems.—*Palæontology.*

LECTURES VI. TO XX.—DESCRIPTIVE GEOLOGY. 44

Geological Maps and Sections: their value and use.
Division of Rocks into stratified and unstratified—Nature of Stratification—Methods of determining its direction and amount.
IGNEOUS ROCKS.—(1.) Underlaying. (2.) Intrusive—Contents of Igneous Rocks—Classification of Igneous Rocks.
METAMORPHIC, or *Altered*, ROCKS.—Their relation both to Aqueous and Igneous Rocks.
AQUEOUS ROCKS.—General principles of Classification.
Palæozoic Period.—Silurian, Devonian, Carboniferous, and Permean series.
Secondary Period.—Triassic series; Lias, Oolitic, and Wealden series; Cretaceous series.
Tertiary Period.—European Tertiaries, older, middle, and newer—Asiatic and American Tertiaries.
Transition from the Tertiary to the Recent period—Condition of the Earth immediately before the introduction of Man.

These LECTURES will COMMENCE on THURSDAY, 24th February, at Nine o'clock, and will be continued every succeeding Saturday, Tuesday, and Thursday, at the same hour. Some extra Lectures, also, will be delivered—due notice of which will be given.

An Examination will be held at the close of the course.

Fees for attendance, to those who are not members of the class of Applied Sciences in King's College, TWO GUINEAS AND A HALF.

BIRMINGHAM AND OXFORD JUNCTION RAILWAY.
Notice is hereby given, that the next ORDINARY MEETING of the shareholders of the BIRMINGHAM AND OXFORD JUNCTION RAILWAY will be HELD at Dee's Royal Hotel, in Temple-row, Birmingham, on Saturday, the 19th day of February, 1848, at half-past Two o'clock in the afternoon.

The transfer books of the company will be closed from and after the 7th day of Feb. next, until after the day of the meeting.

Proxy papers, in order to be available, must bear a stamp of 2s. 6d., and must be received by the secretary 48 hours, at least, before the time appointed for the meeting. 45

P. H. MUNTZ, Chairman.
JOHN W. KIRSHAW, Secretary.

34, Bennett's-hill, Birmingham, Jan. 26, 1848.

BIRMINGHAM, WOLVERHAMPTON, AND DUDLEY
RAILWAY.—Notice is hereby given, that the next ORDINARY MEETING of the shareholders of the BIRMINGHAM, WOLVERHAMPTON, AND DUDLEY RAILWAY COMPANY will be HELD at Dee's Royal Hotel, in Temple row, Birmingham, on Saturday, the 19th day of February, 1848, at Twelve o'clock at noon.

The transfer books of the company will be closed from and after the 11th day of Feb. next, until after the day of the meeting.

Proxy papers, in order to be available, must bear a stamp of 2s. 6d., and must be received by the secretary 48 hours, at least, before the time appointed for the meeting.

WILLIAM MATHEWS, Chairman,
JOHN W. KIRSHAW, Secretary. 46

34, Bennett's-hill, Birmingham, Jan. 31, 1848.

BRISTOL AND EXETER RAILWAY COMPANY.—
Notice is hereby given, that the next HALF-YEARLY GENERAL MEETING of the proprietors of this company will be HELD, in pursuance of the Act of Parliament, at the White Lion Hotel, in the city of Bristol, on Thursday, the 2d of March, at Twelve o'clock, for the election of four directors, in the room of those who retire, and for other affairs. The chair will be taken at One o'clock precisely.

JAMES W. BULLER, Chairman.

The retiring directors may be re-elected. 47

The transfer books will be closed on Monday, the 21st of February, and not be reopened until after the said general meeting, on the 2d of March.

The dividend and interest for the half-year, ending on the 31st of December, 1847, will be payable to those shareholders who stand registered when the transfer books are closed on the said 21st day of February.

Shares in arrear do not entitle the holders to vote, nor are proxies available, unless lodged with the secretary five days, at the least, before the meeting.

By order of the board of directors,
Bristol Office, 30, Broad-street, Feb. 4, 1848. J. B. BADHAM, Secretary.

CALEDONIAN RAILWAY.—Notice is hereby given, that the
CALEDONIAN RAILWAY will be OPENED, for PASSENGER TRAFFIC, between EDINBURGH and GLASGOW, and CARLISLE, on TUESDAY next, the 15th February current. By order, J. W. CODDINGTON, Secretary.
Edinburgh, Feb. 8, 1848. 48

CALEDONIAN RAILWAY—LOANS ON DEBENTURES.
The CALEDONIAN RAILWAY COMPANY are prepared to RECEIVE TENDERS OF LOANS ON DEBENTURES, in sums of not less than £500, for three or five years—bearing interest at the rate of 5 per cent. per annum, payable half-yearly, in Edinburgh, Glasgow, London, Liverpool, Manchester, or Bristol.

Tenders to be addressed to this office. Parties may also communicate personally with Messrs. Foster and Braithwaite, 68, Old Broad-street, London.

By order of the directors, D. RANKINE, Treasurer.
Caledonian Railway Office, 122, Princes-street, Edinburgh, March 26, 1847. 49

CLARKE AND VARLEY'S PATENT ELASTIC ATMOSPHERIC RAILWAY TUBE.
The PROPRIETORS are now prepared to GRANT LICENSES, or TREAT with RAILWAY COMPANIES and OWNERS of MINERAL, or other PRIVATE RAILWAYS, for the ADOPTION of the PATENT TUBE. 50

IMPORTANT IMPROVEMENTS have been recently effected in its CONSTRUCTION, and the proprietors have caused such experiments to be made on the working of the tube at Blackwall, by Mr. William Gravatt, in conjunction with their own engineer, as justify them in recommending this invention, with perfect confidence, to the notice of the public. It is one capable of removing the practical difficulties that have hitherto interfered with the success of the atmospheric principle; and they feel convinced, that, by its means, the superior advantages of this system of railway propulsion will be fully established.

The EXPERIMENTAL TUBE, which is 15 inches diameter, and above 300 ft. in length, may now be seen in operation every day, from One till Four o'clock, at the Poplar Station, on the London and Blackwall Railway.

Communications to be addressed to Mr. W. B. Hays, engineer to the proprietors, of whom any further information may be obtained, at their office, 31, Parliament-street, Westminster.—Feb. 5, 1848.

JOWETT'S PATENT HYDRAULIC TELEGRAPH.
OFFICES—No. 17, WELLINGTON-STREET, STRAND.
(Adjoining the *Morning Post* and *Court Journal*.) 51

PRELIMINARY ANNOUNCEMENT.

In the present important age of mechanical invention and advancement in the various branches of science, probably one of the most prominent production of fertile genius is that of instantaneous correspondence by telegraphic means upon railroads, no matter how far distant the transit. Telegraphic communication by electric machinery has already exhibited, upon numerous lines of locomotive traffic, the great advantages derived by the public through the medium of its powerful agency. But, successful as the telegraph mode of correspondence by electric aid may be considered, still greater and far more effective results will be secured to the public by Jowett's Patent Hydraulic Telegraph. The patentee, in the present limited detail, merely claims public attention to the following items in the way of superiority over the electric telegraph:—1. The economy in the construction of the hydraulic telegraph will be, at least, a saving of two-thirds, compared with the outlay required by the electric, independently of the considerable increase of speed, and the results far more decisive and distinct.—2. No expense whatever (after the first amount for construction) will be necessary to provide for the continuous working of the hydraulic telegraph, it being beyond the possibility of doubt that its action can be deranged, nor can any atmospheric changes interfere with, or affect, the success of its operations.—3. No physical impediment can compete with the laying down and the perpetual use of the hydraulic telegraph—neither height, depth, sinuosity, nor distance opposing in the slightest degree in perfect action. Detailed printed particulars are in preparation. In the meantime the patentee may be seen daily, from Eleven to Three, at the offices, 17, Wellington-street, Strand, where the models and plans are open to the inspection of the public.

TO RAILWAY ENGINEERS, CONTRACTORS, AND
OTHERS.—The ADVERTISER having obtained her Majesty's Letters Patent for an IRON TRUSS BRIDGE, peculiarly adapted, from its great strength and economy, for RAILROADS, is ready to TREAT with such companies, and other persons, as may feel disposed to adopt it. This bridge has been put up in Washington, and two of them (one of 70 feet span, weighing 13 tons) have been erected on the line of the New York and Harlem Railway; they are highly approved of by the directors, and several other companies have, in consequence, expressed their intention of adopting it. 52

A model can be seen, and further particulars given, either personally or by letter, on application to Mr. S. Moulton, care of the Editor of the *Mining Journal*, 26, Fleet-street.

ACCIDENT AT EUSTON-SQUARE.—The METALLIC
SAND, or ENGLISH POZZOLANO, after many years trial, has been found an invaluable article in the CONSTRUCTION of RAILWAY TUNNELS, SEWERS, and all UNDERGROUND WORKS, requiring great strength and density. In admixture with Lime or Roman Cement, from its chemical properties, it forms a Mortar, or Concrete, of flinty hardness, and almost entire incompressibility; and, from its adhesive and impervious qualities, it completely and for ever excludes water. The more it is exposed to the atmosphere, and to wet and damp, the harder and more durable it becomes: it has been EXTENSIVELY used in the great tunnels on the London and Birmingham Railway; in the foundations of the New Houses of Parliament; sea walls on the South Devon Railway; Clifton reservoirs, and other important works.

For further particulars, apply to Mr. C. K. DYER, 4, New Broad-street, London.

Analysis of the Metallic Sand.

Silica..... 49—Iron..... 32—Alumina, lime, &c..... 19. 53

STEAM TO INDIA AND CHINA, VIA EGYPT.—Regular
MONTHLY MAIL (steam conveyance) for PASSENGERS and LIGHT GOODS to CEYLON, MADRAS, CALCUTTA, PENANG, SINGAPORE, and HONG-KONG.

THE PENINSULAR AND ORIENTAL STEAM NAVIGATION COMPANY 54 BOOK PASSENGERS and RECEIVE GOODS and PARCELS for the ABOVE PORTS by their steamers—starting from Southampton the 20th; and from Suez on or about the 10th of every month.

For rates of passage-money, plans of the steamers, and to secure passages, apply at the company's offices, 51, St. Mary Axe, London.

SWANSEA IRON SHIPBUILDING COMPANY.
BUILDERS OF IRON SHIPS, STEAMERS, BARGES, &c.

MANUFACTURERS OF
BOILERS FOR LAND, MARINE, AND LOCOMOTIVE ENGINES, 55
TANKS FOR SHIPPING, GASOMETERS, ROOFS, &c.,
SWANSEA.

EAST WHEAL FRIENDSHIP MINING COMPANY,
IN THE PARISHES OF PETER-TAVY AND MARY-TAVY, DEVON.

TO BE WORKED ON THE COST-BOOK PRINCIPLE,

"Which exempts shareholders from any liability beyond the amount of their share, and enables them to withdraw at any time, and demand their portion of the value of the mine, by giving notice to the Secretary to that effect."

UNDER THE INSPECTION OF MR. RICHARD EDWARDS,
Manager of Wheal Franco, Plymouth Wheal Yeoland, &c. &c. &c. 56

TREASURER—WILLIAM EALES, Esq., 159, Fenchurch-street.

A Board of Directors will be chosen at the First Meeting of the Shareholders.

EAST WHEAL FRIENDSHIP is a COPPER MINE, lying next adjacent to the well-known Wheal Friendship, which has been a most profitable investment—returning upwards of £400,000 to the adventurers, and is at the present time paying large dividends. The lodes are a continuation, running through East Wheal Friendship, for which see the report, furnished by gentlemen, whose practical experience and ability in mining operations are undisputed.

REPORT OF J. H. HITCHINS, ESQ.
(Of the Devon Great Consols.)

At the mine, I met Captains Phillips and Dunn, and surveyed the whole of the sett and the adjoining property, with a view to ascertain how much of the latter it will be desirable for the company to obtain, in addition to what they already are in possession of. It appears from the measurement this day made, to ascertain the extent of the company's sett, that it is in length, from one extreme point to the other, lineally, on the course of the lode, about 600 fms., and in width, about 250—that is the eastern side of the River Tavy; on the western side of the river, the sett is less comprehensive; the length of it being about 100 fms., and the width about 50, on the underlay of the lode. In viewing the sett generally, I have only to remark, that I consider it one possessing advantages of more than ordinary character, and as a mining investment, as good as any can be. The lode at present in the adit end, now driving east of the River Tavy, being the large masterly one of Wheal Friendship Mine, which has proved so profitable to the adventurers—from 4 to 5 ft. wide, intermixed throughout with gossan, mundic, copper, peach, prian, and all the other characteristics comprised in the term, kindly.

REPORT OF CAPTAIN RICHARD EDWARDS.
(Of Wheal Franco, Plymouth Wheal Yeoland.)

East Wheal Friendship, I find, is situated on the banks of the River Tavy, in the parishes of Mary-Tavy, and Peter-Tavy. It is east, on the course of the lodes of the Great Wheal Friendship, and the Eastern boundary of that mine is the western of this. (*Vide Plan.*) The strata, with the exception of hard grey rock, is killas, and the granite is close on the eastern boundary. Three lodes have been discovered, although they are not now open; and a shaft has been sunk on the middle one, on the eastern side of the River Tavy, on a patch of hard rock, from which some good ore was taken; and the situation of the mine is favourable to the production of copper, being near the junction of the granite and killas, and on the run or course of the Wheal Friendship lodes. It is supposed, the hard rock will disappear, as the workings are extended downwards. On the western side of the river, on the course of the middle lode, there is a very high precipice of this same hard grey rock; but, on the western side, between it and the Wheal Friendship boundaries, there is a change of ground; and, I think, if the lode were opened here, it is very probable that it would be productive. I call this part of the sett a good speculation, particularly as there is an adit already driven in at the base of the precipice, which, I understand, has reached nearly to the opposite side of the hard rock. About 80 fathoms to the north of the middle lode, there is said to be a large lode, producing stones of copper ore near the surface; this is to the north of the hard ground, and in a situation that would warrant being prosecuted.—*Horrabridge, January* 18, 1848.

REPORT OF CAPTAIN THOMAS DUNN.
(Of East Wheal Friendship.)

We first commenced driving the adit level east, when we cut a large lode, with fine stones of yellow copper ore; we then sunk an engine shaft to the depth of 50 fathoms, through a very promising lode, 10 feet wide. This lode was thought by all mining agents, to be one of the best they ever saw—yielding not less than 10 tons of mundic, tin, and copper, mixed, to the fathom. In the 20 feet fathom, the lode divided—one part going down right, the other underlaying north, about 2 feet in the fathom. I should now recommend sinking the engine-shaft deeper, when I have every reason to believe that we shall cut the Wheal Friendship lode. You can see how much we have sunk and driven by the plan sent. I can only say, it is a very good investment, and I hope you will save me a few shares. I have sent specimens (which may be seen at the office), from the lode; and there is, at least, one ton of good ore at the surface.—*Tavistock, Jan* 6.

N.B.—The foregoing reports are condensed, but the originals can be seen at the office.

East Wheal Friendship is divided into 1024 shares, depost 3*l.* per share—2*l.* of which goes for the purchase of the sett, and for work done (vide plan); and 1*l.* into the hands of the treasurer, towards the working. Certificates, containing five shares each, will be issued to each shareholder, which must be signed by the treasurer and secretary, and no shares will be retransferred, without the delivery of the said certificates, bearing the re-indorsement of the holder. The books of the company will, at all reasonable times, be open to the inspection of the shareholders.

Application for the remaining shares to be made either to the secretary, at the office of the company, No. 48, Threadneedle-street, London; the treasurer, William Eales, Esq., 159, Fenchurch-street; Mr. James Lane, mining share agent, 75, Old Broad-street; the solicitor, C. V. Bridgeman, Esq., Tavistock; or through any respectable broker.—Reports from other mining agents can be seen at the office.

STRONG MIXING PIG-IRON.—The YSTALYFERA
IRON COMPANY beg to solicit ORDERS for their ANTHRACITE PIG-IRON. This iron mixes well with Scotch pig—imparting to it strength and elasticity, and receiving from it a portion of its softness and fluidity. No. 3 Pig is recommended for mixing with soft iron—Nos. 1 and 2, for machinery castings, requiring great soundness and strength. At this period, when cast-iron is so much employed in the construction of bridges and other buildings, requiring all the strength and elasticity which the best mixture of metal will afford, it may be interesting to call attention to the characteristics of ANTHRACITE PIG-IRON, as REPORTED on by that great practical authority, the late DAVID MUSHET, Esq., M.I.C.E.:—

"It greatly exceeds, in *strength*, in *deflective* powers, and capacity to resist *impact*, any iron at this time manufactured in the United Kingdom." 57

"It now only remains for me to mention a property peculiar to this iron, which was noticed at the time I made the trial experiments, four years ago, but which has been more fully developed in those more recently made. The property referred to is one of *great springiness*, or *elasticity*, which communicates a tendency to the bar, in deflecting and breaking, to resume its rectangular form. Bars that had obtained a permanent set of 2-10ths, when afterwards broken, presented but a slight deviation from a right line; and in no case, did the curvature exceed one-fourth of a tenth."

"It was also remarked, that most of the fractures, in breaking, presented a *regularity of grain* throughout, resembling the structure of *unhardened steel*."

Address THE YSTALYFERA IRON COMPANY,
Dated June 22, 1847. *Near NEATH, SOUTH WALES.*

HOT-BLAST WITHOUT COAL, LABOUR, OR REPAIRS.
DIXON AND BUDD'S PATENTS.

Apply for particulars, or to inspect the process in operation on six blast-furnaces, to J. Palmer Budd, Esq., Ystalyfera Iron-Works, near Neath. 58
Dated June 22, 1847.

LAMBERT'S PATENT FLEXIBLE DIAPHRAGM
WATER VALVES, or TAPS.—A certain PREVENTATIVE of LEAKAGE, superseding the use of the metal plug-tap, which is so continually out of order. They are more durable, less expensive, and being nearly frictionless, are opened and closed with perfect ease. They have been tested under various pressures, and have given the greatest satisfaction.—MANUFACTURED ONLY by the Patentees,

THOMAS LAMBERT & SON, Brass and Cock Founders, 59
30, New-cut, Blackfriars-road.

FLEXIBLE HOSE-PIPES FOR LOCOMOTIVE ENGINES,
RAILWAY CRANES, FIRE-ENGINES, GAS, &c.
PATENT VULCANISED INDIA-RUBBER HOSE-PIPES AND TUBING OF EVERY DESCRIPTION. 60

These pipes are made to stand hot-water without injury—are very superior to leather pipes, or the common India-rubber pipes; and, as they do not become hard or stiff in the lowest temperatures, or require any application when out of use, are particularly well adapted for fire-engines.

FLEXIBLE TUBING, of every description, for gas, chemical purposes, &c.

VULCANISED INDIA-RUBBER WASHERS, all sizes, for steam and hot-water joints, &c.—Sole manufacturer, JAMES LYNE HANCOCK,
Goswell Mews, Goswell-road, London.

TO ENGINEERS AND BOILER-MAKERS.

LAP-WELDED IRON TUBES, FOR MARINE AND
LOCOMOTIVE STEAM-BOILERS,
TUBES FOR STEAM, GAS, AND OTHER PURPOSES,
ALL SORTS OF GAS FITTINGS. 61

THE BIRMINGHAM PATENT IRON TUBE COMPANY,
42, CAMBRIDGE-STREET, BIRMINGHAM, & SMETHWICK, STAFFORDSHIRE,
MANUFACTURE BOILER and GAS TUBES, under an exclusive License from Mr. R. Prosser, the patentee. These tubes are very extensively used in the boilers of marine and locomotive steam-engines in England and on the Continent—are stronger, lighter, cheaper, and more durable than brass or copper tubes, and are warranted not to open in the weld.

42, CAMBRIDGE-STREET, CRESCENT, BIRMINGHAM.
WORKS—SMETHWICK, STAFFORDSHIRE.
LONDON WAREHOUSE—No. 68, UPPER THAMES-STREET.

PATENT IMPROVEMENTS IN CHRONOMETERS,
WATCHES, AND CLOCKS.—E. J. DENT, 82, Strand, and 33, Cockspur-street, watch and clock maker, BY APPOINTMENT, to the Queen and his Royal Highness Prince Albert, begs to acquaint the public, that the manufacture of his chronometers, watches, and clocks, is secured by three separate patents, respectively granted in 1836, 1840, 1842. Silver lever watches, jewelled in four holes, 6 gs. each; in gold cases, from £8 to £10 extra. Gold horizontal watches, with gold dials, from 8 gs. to 12 gs. each. 62

DENT'S PATENT DIPLIEDOSCOPE, or meridian instrument, is now ready for delivery. Pamphlets containing a description and directions for its use 1s. each, but to customers gratis.

CALDWALL'S PATENT SELF-FLEETING WINDLASS,
CAPSTAN, AND RIDING BITS COMPANY.
OFFICES—No. 73, KING WILLIAM-STREET, LONDON. 63

The patronage of the Lords of the Admiralty and the Hon. Trinity Board, together with testimonials of several of the most practical, scientific, and influential nautical men in the kingdom, having guaranteed the importance to the maritime world of the above-mentioned invention, it is now proposed to carry out the manufacture of the several patented articles—WINDLASSES, CAPSTANS, RIDING BITS, &c., by means of a capital of £100,000, to be raised in 5000 shares, of £20 each, and to be conducted by a company, to be formed for the purpose.

The above inventions, in addition to their superiority over the old windlass, capstan, &c., have the recommendation of greater economy, as they can be supplied at a less price—affording a very handsome profit, and, consequently, a large return to shareholders.

Models may be seen in operation—prospectuses obtained, and every information given, by application at the office, 73, King William-street, City, from Eleven till Four daily, and orders are received there and at the manufactory, Bell Wharf, Shadwell.

NEW SMITHFIELD CATTLE MARKET & ABATTOIRS
COMPANY.
Capital £400,000, in 20,000 shares, of £20 each. 64

Deposit 2s. per share, until complete registration, when a call of £1 per share will be made, which will be the only call this session.

The Bill to Incorporate this Company has passed Standing Orders without opposition; and all further application for shares must be made before the 18th inst., on which day the allotment must be made.

Prospectuses, with names of directors, and maps, showing the intended sites of the market and abattoirs, with every other information, may be obtained at the offices of the company. By order, CHARLES NEWTON, Secretary.
4*l*, Warnford-court, Throgmorton-street, Feb. 9, 1848.

LONDON AND PROVINCIAL DETECTIVE ASSOCIATION, FOR THE PROTECTION OF TRADE.
No. 39, SOUTHAMPTON-BUILDINGS, HOLBORN, LONDON. 65

OFFICE HOURS: TEN TO FOUR.

The object of this institution is to furnish every information (which may be obtained by subscribers only) respecting all parties, in any capacity whatever, avoiding their creditors, under any circumstances; also, in providing every species of information calculated to protect Bankers, Merchants, Tradesmen, Companies, Institutions, Assurance Offices, Loan Societies, Auctioneers, Landlords, Tenants, &c., in such a manner hitherto unattempted by any kindred society.

Subscribers may be preserved from losses through fraud of all kinds, by previous application at this office. They are also requested to make every communication in their power that may tend to protect the members, which will be considered strictly private, and, at the same time, deemed a favour.

Persons wishing to become members of this association, must apply, by letter only, addressed (pre-paid) to the secretary, who will forward the rules.

Subscribers only are eligible to apply for any information—the terms of which are £1 1s. per annum—10s. 6d. in advance. H. E. NEWMAN, Secretary.

NATIONAL DISINFECTED AND DRY MANURE
COMPANY.
OFFICES—No. 7, BANK CHAMBERS, LOTHBURY. 66

[REGISTERED PROVISIONALLY.]

Capital £200,000, in 20,000 shares, of £10 each.—Deposit £1 per share.

No call will exceed 5s. per share, and the liability of shareholders will be limited to the amount of their respective shares.

PROVISIONAL COMMITTEE.
GERARD BARRY, M.D., Charles-street, St. James's-square.
JAMES ORGILL, Esq., Birmingham.
THOMAS BALDWIN, Esq., Birmingham.
JOSHUA E. COOPER, Esq., West Ham, Sussex.

The object of this company is to collect together the animal and vegetable refuse of large and populous towns, and subsequently to convert them into a dry, inodorous and portable manure.

By the company's process all decomposed substances, whether animal or vegetable, liquid or otherwise, may be rapidly converted into a scentless manure—rich in every fertilising quality, and abounding in vegetable stimulant.

A manure, somewhat similar, has for some time been manufactured by a prosperous company in Paris, under the commercial firm of "Baronnet and Co." Their last report states, that "crops were obtained incomparably finer, and more abundant, than by the use of any other manure.

The cost of preparation is trivial, in comparison with any of the present methods of dressing. The committee, therefore, have no hesitation in affirming, that the profits will realise the most sanguine expectations of shareholders.

The primary operations of the company will commence in the town of Birmingham. Samples of the manure may be seen at the offices.

An influential list of patrons and directors will shortly be advertised; meanwhile applications for shares, agencies, &c., may be addressed to

JAMES H. KENWORTHY, Secretary pro tem.

NATIONAL DISINFECTED AND DRY MANURE
COMPANY.—Notice is hereby given, that APPLICATIONS for SHARES in this company will NOT BE RECEIVED after the 21st inst. 67

7, Bank Chambers, Feb. 10, 1848.

AGRICULTURIST CATTLE INSURANCE COMPANY,
8, CHATHAM-PLACE, BLACKFRIARS, LONDON.
(Registered under 7 and 8 Vic., cap. 110.) 68

Subscribed Capital—£250,000.

This company was established for the PROTECTION of FARMERS and AGRICULTURISTS, against LOSS BY DISEASE or ACCIDENT among their LIVE FARMING STOCK, in June, 1845; and, on the 31st December, 1847, had issued 20,000 agreements, and paid upwards of £100,000 for losses.

This being a PROPRIETARY COMPANY, with a *subscribed capital*, insurers incur no liability beyond the amount of their premiums, and are put to no additional expense.—*Three-fourths* of the insured amount is paid in case of loss.

LIFE INSURANCE DEPARTMENT.

Insurances on Lives are effected—*Annuities and Endowments* granted—and every branch of *Life Insurance* conducted on the *most liberal terms*. Farmers and Agriculturists will find this office *moderate* in its *rates*, and peculiarly adapted to their position and circumstances.

Annual Premiums for the Insurance of £100 on a Single Life.

Age next B. Day.	Whole of Life without Profits.	Whole of Life with Profits.	For the term of One Year.	For the term of Five Years.
15	£1 11 3	£1 13 7	£0 16 10	£0 18 8
20	1 15 0	1 17 8	1 1 3	1 2 5
25	1 19 10	2 2 10	1 4 0	1 4 8
30	2 5 7	2 9 1	1 5 9	1 6 4
40	3 0 7	3 5 4	1 9 10	1 11 4
50	4 4 7	4 11 4	2 1 6	2 5 7

Application for prospectuses, and every other information, may be made to WILLIAM FENTON, Esq., Manager,
Or to the Local Agents.

NATIONAL LOAN FUND LIFE ASSURANCE SOCIETY,
26, *CORNHILL, LONDON.*
Capital £500,000.—Empowered by Act of Parliament.

This institution embraces important and substantial advantages with respect to Life Assurances and Deferred Annuities. The assured has, on all occasions, the power to borrow, without expense or forfeiture of the policy, two-thirds of the premiums paid (see table); also the option of selecting benefits, and the conversion of his interests to meet other conveniences or necessity.

Assurances for terms of years are granted on the lowest possible rates. 69

DIVISION OF PROFITS.

The remarkable success and increasing prosperity of the society has enabled the directors, at the last annual investigation, to declare a fourth bonus, varying from 35 to 85 per cent. on the premiums paid on each policy effected on the profit scale.

EXAMPLES.

Age.	Sum.	Prem.	Year.	Bonus added.	Bonus in Cash.	Permanent reduction of Premium.	Assured may Borrow.
60	£1000	£0 3 4	1837	£217 15 1	£109 0 11	£16 0 4	£445 0 0
			1838	192 3 0	87 1 4	13 10 2	395 11 1
			1839	165 11 10	74 1 9	11 3 1	346 2 2
			1840	116 7 6	54 0 10	7 18 10	296 13 4
			1841	111 6 8	49 10 0	7 10 4	247 4 5

The division of profits is annual, and the next will be made in December of the present year.

F. FERGUSON CAMROUX, Secretary.

ANOTHER CURE OF ASTHMA, of FOURTEEN YEARS'
STANDING, by Dr. LOCOCK'S PULMONIC WAFERS. Dated Holyhead-road, Wednesbury, Sept. 6, 1847. "SIR,—When I received the first box of Dr. Locock's Wafers from you, I was labouring under one of those attacks of asthma, to which I have been subject now for about 14 years. My breathing was so very difficult, that I expected every inspiration would be my last. As for sleep, that was impossible, and had been so for several weeks. The first dose (only two small wafers) gave me great relief; the second more so—in short, the first box laid the groundwork for the cure, which only four boxes have effected, and I am now quite well. (Signed)—G E. Bignell."—Witness, Mr. F. C. Ladbury, surgeon, &c. To singers and public speakers they are invaluable for strengthening and clearing the voice. They have a pleasant taste.—Price 1s. 1½d., 2s. 9d., and 11s. per box. Agents: Da Silva and Co., 1, Bride-lane, Fleet-street, London.—Sold by all medicine vendors. 70

London:—Printed and Published, weekly, by HENRY ENGLISH, at the Office, No. 26, FLEET-STREET,
in the city of London, where all Communications and Advertisements are requested to be forwarded—addressed to "the Editor"—post-paid. [*February* 12, 1848.

*** It will at all times save much delay and inconvenience, if communications are directed simply
To THE EDITOR,
Mining Journal Office,
26, FLEET-STREET, LONDON.

And POST-OFFICE ORDERS, &c., must be made payable to WILLIAM SALMON MANSELL, as acting for the proprietors.